DOCUMENT RESUME

ED 433 551 CS 510 132

TITLE	Proceedings of the Annual Meeting of the Association for Education in Journalism and Mass Communication (82nd, New Orleans, Louisiana, August 3-8, 1999). Miscellaneous.
INSTITUTION	Association for Education in Journalism and Mass Communication.
PUB DATE	1999-08-00
NOTE	178p.; For other sections of this proceedings, see CS 510 132-153.
PUB TYPE	Collected Works - Proceedings (021)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Ethics; Foreign Countries; Higher Education; *Information Processing; Journalism Education; Journalism Research; *News Reporting; Professional Associations; Research Needs
IDENTIFIERS	*Environmental Reporting; India; Iowa; News Sources; *Risk Communication

ABSTRACT

The Miscellaneous section of the Proceedings contains the following 6 papers: "The Effect of Membership in the Society of Environmental Journalists on Inclusion of Enabling Information in Stories on Water Quality" (Michelle M. Tedford); "Press, Privacy and Presidential 'Proceedings': Moral Judgments and the Clinton-Lewinsky Affair" (Jennifer L. Lambe, Christina L. Fiebich, and Darcia Narvaez); "A Research Agenda for Establishing a Grounding for Journalistic Ethics" (Dan Shaver); "Framing an Environmental Controversy in India's English-Language Press: A Study of Text in Context" (Elizabeth Burch); "The Sources Iowans Trust: The Impact of Involvement on Credibility Perceptions and Channels Used for Environmental Issues" (Sunae Jo and Lulu Rodriguez); and "The Relationship of Risk Information Processing to Consideration of Behavioral Beliefs" (Robert J. Griffin, Kurt Neuwirth, James Giese, and Sharon Dunwoody). (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 433 551

Proceedings of the Annual Meeting of the Association for Education in Journalism and Mass Communication (82nd, New Orleans, Louisiana, August 3-8, 1999): Miscellaneous.

Association for Education in Journalism and Mass Communication.

1999-08

BEST COPY AVAILABLE

CS 510 132

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

J. McGill

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

The effect of membership in the Society of Environmental Journalists on inclusion of enabling information in stories on water quality

Michelle M. Tedford
masters student, Ohio University E.W. Scripps School of Journalism

6798 Hoover Ave.
Dayton, OH 45427
937-837-7021
mt-ka@commkey.net

Submitted for consideration to the Graduate Education Interest Group of the Association for Education in Journalism and Mass Communication National Conference, August 1999.

The effect of membership in the Society of Environmental Journalists on inclusion of enabling information in stories on water quality

ABSTRACT

This study builds on Rossow and Dunwoody's finding that enabling information in environmental stories is tied to editors' concerns for the issues. If membership is an indicator of concern, stories by SEJ members should include more enabling information from different sources, include more graphics, and influence the story's placement. In a look at water quality stories from 1993, none of these differences was found to correspond with membership when comparing member and non-member groups.

The effect of membership in the Society of Environmental Journalists on inclusion of enabling information in stories on water quality

In 1993, over 100,000 people were sickened from contamination to the municipal water supply in Milwaukee, Wisconsin.[1] It was an event heavily covered by national as well as local media. This contamination incident is only one of countless environmental risk issues being covered in daily newspapers throughout the country.

Environmental risk communication informs the public of the danger, probability of occurrence/recurrence, causes and preventions of the risk in question. The effectiveness of risk communication holds implications for society, since the information can be used by the public to put demands on business or government to alleviate the risk to the community.[2] One type of information is called "enabling" or "mobilizing" information. This is information that would be useful for readers trying to get more information about or to act on the reported issues.

Environmental concern has been growing since the 1950s. In a 1994 public opinion poll, 61.1% of respondents believed that the government was "spending too little" to solve environmental problems.[3] Since 1970 — the year of the first Earth Day celebration — media coverage of the environment has also increased.[4]

---

[1] Associated Press, "Milwaukee water suspect in illness," *Capital Times*, April 8, 1993: 1A.

[2] Kandice L. Salomone, Michael R. Greenberg, Peter M. Sandman and David B. Sachsman, "A Question of Quality: How Journalists and News Sources Evaluate Coverage of Environmental Risk," *Journal of Communication* 40 (4): 117 (Autumn 1990).

[3] James Shanahan and Katherine McComas, "Television's Portrayal of the Environment: 1991-1995," *Journalism Quarterly* 74 (1):150 (Spring 1997).

A need to improve the quality of this reporting was identified in the 1980s, and the Society of Environmental Journalists was founded in 1990. The society recognized that "the public is largely uninformed about environmental issues, and much of what it does know stems from mass media."[5] The mission of SEJ, through programs and services, is to "advance public understanding of environmental issues by improving the quality, accuracy, and visibility of environmental reporting. ... SEJ acts to raise awareness among editors and other key decision makers in the media on the basic importance of environmental reporting."[6]

The purpose of this study is to determine whether membership in the Society of Environmental Journalists has a quantifiable impact on the product — the environmental risk communication story. Following the pattern of a previous study by Rossow and Dunwoody,[7] which found that editor concern for environmental issues increases the inclusion of enabling information, this study will compare enabling information by SEJ members and non-members by looking at water quality stories around the time of the Milwaukee water contamination. If reporter concern for the environment equates with membership in SEJ, then a similar increase in enabling information should be found. The effects of membership on journalists' stories has not been widely researched, and this study will not be able to indicate if concern led to membership, or membership led to concern. But if journalist concern furnishes the public with a better product — that is, more useful information — then their is a need to identify factors leading to a better product.

---

[4] C.R. Ader, "A longitudinal study of agenda setting for the issue of environmental pollution," *Journalism and Mass Communication Quarterly* 72 (2): 301 (Summer 1995).

[5] Society of Environmental Journalists, "About SEJ," <http://www.sej.org/env_sej.htm>.

[6] Society of Environmental Journalists, "About SEJ."

[7] Marshel D. Rossow and Sharon Dunwoody, "Inclusion of 'Useful' Detail in Newspaper Coverage of a High Level Nuclear Waste Siting Controversy," *Journalism Quarterly* 68: 87-100 (Spring/Summer 1991).

LITERATURE REVIEW

Need for Enabling Information

The need for enabling information, while not called such, was voiced by environmental writer Bill McKibben in his 1992 book. He said we are living in an "age of missing information" about environmental issues.[8] Since elites are considered to have an established connection to sources of influence, it can be surmised that the mass public is most at loss in the decision-making process when enabling information is missing.[9] While missing information can lead to ignorance, enabling information can help bridge that gap between the elites and the public by providing an easy link between knowledge and action.

The inclusion of mobilizing information, such as a phone number, address or details on a meeting, can increase public participation in the issue by reducing the time and resources the public must exert to follow up on an issue. The mobilizing effect can be further enhanced if the reader brings to the story concern for the issues being discussed.[10] The finding that over half the respondents to an opinion poll believe the government is spending too little on environmental issues could signal such a predisposed motivation. Mobilizing information can also enhance a person's sense of responsibility or lessen fears that action on the issue would be inappropriate or inconsequential.[11]

---

[8] Shanahan and McComas, "Television's Portrayal of the Environment," 147.

[9] Steven E. Hungerford and James B. Lemert, "Covering the Environment: A New 'Afghanistanism'?" *Journalism Quarterly* 50: 477 (Autumn 1973).

[10] Carl R. Bybee, "Mobilizing Information and Reader Involvement: An Empirical Test," *Journalism Quarterly* 59: 399-400 (Autumn 1982).

Local Environmental Information

This study looks specifically at enabling information written in stories by local reporters, most of which are local in scope. All stories from wire services or outside publications were removed from the sample. Murch makes a case for the need for local environmental information. In a 1970 survey, Murch found that the more committed one is to his or her local surroundings, the less likely he or she is to find defects in it. In this study, such defects include water and other environmental pollution. Information on these local defects, if the public is to act on it, needs to come from the mass media.[12] His survey revealed that the public is willing to take personal responsibility for and act on issues of environmental concern, but often is unaware of roads to possible solutions. Respondents act favorably when courses of action are proposed. "What appears to be most needed at this point are proposals that show the individual just how he (sic) can become engaged in the struggle within his own community."[13]

Like Murch, Schramm and Roberts believe the media has a responsibility to get information to the people.[14] In the United States, the government has a responsibility to both protect and provide clean drinking water. Key players in environmental issues also have the obligation to influence the outcomes of governmental decisions through such avenues as public hearings and protests. Schramm and Roberts write that in this society, the governed have both the right and the responsibility to affect governmental outcomes. But the people must get basic information from somewhere to act. Often that somewhere is the media. The media, therefore, has a responsibility to be sure the information provided to the public is complete and is available before the outcome is decided, so the public can actively shape the policies. Only the media can be sure that information provided to citizens on issues of public debate is complete, and their success or failure at this can directly affect public participation.[15]

---

[11] Bybee, "Mobilizing Information and Reader Involvement," 400.

[12] Arvin W. Murch, "Public Concern for Environmental Pollution," *Public Opinion Quarterly*, 35: 101-102 (Spring 1971). Murch found the media was the dominant source the public used for information about environmental pollution.

[13] Murch, "Public Concern for Environmental Pollution," 106.

Communication Yielding Solutions

In recent years, progress on environmental issues has been stalled due to prolonged inter-governmental agency fighting, court cases and NIMBYism (a "not-in-my-back-yard" mentality). Struggles over dealing with waste issues and siting landfills, for example, are stalled by citizens complaining about noise and pests, environmentalists suing over threats to drinking water, industry suing over siting delays, and governments deciding to do what they please regardless.

Belsten calls these struggles a result of breakdowns in environmental risk communication.

---

[14] Wilbur Schramm and Donald F. Roberts, "Mass Communication, Public Opinion and Politics," in W. Schramm and D. Roberts, eds., *The Process and Effects of Mass Communication* (Urbana: University of Illinois Press, 1972): 639-40.

[15] Schramm and Roberts, "Mass Communication, Public Opinion and Politics," 639-40.

Only through communication can a community collaborate on an issue and implement the best solution for all stakeholders. She calls for "broad-based, inclusive, credible, open, and early stakeholder involvement" and an interactive process of shared communication.[16] Belsten also notes the function of mass communication in furthering community collaboration, and states that collaboration offers the best hope for community involvement in environmental issues and the resolution of stalled debates.[17] Enabling information, then, would provide the community with information on joining the collaborative process.

Membership and the Journalist's Beliefs

Environmental risk communication took an interesting turn in Wisconsin in 1986. The state was looking to site a high-level nuclear waste landfill. A study by Rossow and Dunwoody found that certain newspapers dealt with risk communication by including enabling information.[18] In newspapers where editors perceived the issue was of personal and public concern, more partial and complete enabling information was included in news stories and editorials. Rossow and Dunwoody interviewed the editors to ascertain their beliefs on the issues, and compared the enabling information results to these beliefs.

This study looks as membership in a journalistic organization as a possible indicator of beliefs. The effects of a reporter's membership have not been widely documented. In a study of partisanship, Patterson and Donsbach found that while most journalists would rate themselves slightly left of the general public, most journalists did not seek out positions that would allow them to exercise their beliefs. Nonobjective reporting, when recorded, may not be so much an effort to "take sides" as it is an outcome of journalistic routines.[19] Therefore, the actual influence of membership in an organization committed to improving the coverage of environmental stories is not clear.

---

[16] Belsten, "Environmental Risk Communication and Community Collaborations," 28 and 34.

[17] Belsten, "Environmental Risk Communication and Community Collaborations," 38-39.

[18] Rossow and Dunwoody, "Inclusion of 'Useful' Detail in Newspaper Coverage," 87-100.

Reporters have been accused of being nonobjective based on use of sources. Schramm and Roberts reported that elected officials use the mass media to shape the knowledge and actions of the electorate.[20] This, and traditional journalistic routines, may lead reporters to include a majority of government sources, especially in environmental stories. Hungerford and Lemert found that in a study of environmental stories printed in Oregon, government sources were the most likely source attributed in environmental stories. Industrial sources finished second, followed by miscellaneous sources, scientists and environmentalists.[21]

Hypothesis

This study looks at whether these sources, and the extent of enabling information connected with these sources, differed between the reporting of SEJ members and of reporters at newspapers where there was no reported SEJ membership. If the hypothesis that membership can be used as an indicator of increased concern for the environment and environmental issues is true, and that this concern influences reporting, then two things should be found:

---

[19] Thomas E. Patterson and Wolfgang Donsbach, "News Decisions: Journalists as Partisan Actors," *Political Communication* 13 (4): 466 (Oct.-Dec. 1996).

[20] Schramm and Roberts, "Mass Communication, Public Opinion and Politics," 641.

[21] Hungerford and Lemert, "Covering the Environment," 50.

- Membership should lead to an increase in the number of enabling opportunities presented.
- Membership should affect the choice of sources connected to enabling opportunities.

Also, a high concern may impact two elements associated with increased visibility of these stories — use of graphics, which draw the reader's attention, and placement on front versus inside pages. Therefore, two additional things may be found:

- Membership should increase the frequency of graphic elements accompanying stories.
- Membership should affect the placement of stories with increased enabling information.

By evaluating these elements, the study should be able to identify if concern leads to similar findings in the Rossow and Dunwoody study, and therefore if membership is an indicator of concern.

METHOD

Sample

The study sample was pulled from U.S. general circulation newspapers available on Lexis-Nexis from April 1, 1993 through Dec. 31, 1993 using the key words "water quality." "Water quality" was chosen because of the prevalence of stories the phrase produced dealing with issues related to the Milwaukee water threat. On April 7, 1993, Milwaukee health officials announced that they suspected the bacteria cryptosporidium to be the cause of flu-like symptoms reported in residents of Milwaukee and 10 suburbs.[22] One week later, the General Accounting Office released a report on the safety of public water supplies. It concluded that states are routinely unable to test for and respond to threats to the nation's water supply,[23] leaving open the door for future troubles such as what hit Milwaukee. In the end, the bacteria, caused by farm runoff reaching the municipal water supply, sickened at least 183,000 people in the Milwaukee area.[24] The months after the Milwaukee incident featured stories on water contamination throughout the nation. Stories on all forms of water contamination and preservation efforts were included.

---

[22] Associated Press, "Milwaukee water suspect in illness."

The stories were chosen from two groups. The first group, hereafter referred to as "SEJ stories," was chosen based on the reporter's membership in the Society of Environmental Journalists. A 1994 SEJ directory, containing names of all those with paid and honorary membership in the organization within the previous year, was used to determine the possible size of the first group. Forty-two newspaper employees in SEJ from 28 newspapers available in the Lexis-Nexis database were identified. A search of Lexis-Nexis using the key words, reporter's name and the above time frame identified 129 stories by 24 reporters at 20 separate newspapers.

The second group, hereafter referred to as "non-SEJ stories," was chosen based on multiple elimination. First, any newspaper with an identified SEJ member was eliminated. A sample was then pulled based on key words and time frame. Stories that contained no bylines or were from a wire service or other newspaper were discarded.

Overall, stories that were identified by "water quality" but did not have water quality or the environment as a main theme were discarded, along with those that appeared in editorial or perspective pages or that were letters to the editor. In all, there were 116 stories from 20 newspapers in the "SEJ stories" sample and 115 stories from seven newspapers in the "non-SEJ stories" sample.

---

[23] Tom Kenworthy, "Water inspections called lax," *The Washington Post*, April 15, 1993: 27A.

[24] Lawrence K. Altman, "The doctor's world: Outbreak of disease in Milwaukee undercuts confidence in water," *The New York Times*, April 20, 1993: 3C.

Coding

Each story was coded for newspaper, reporter's name and sex, word length, location (section and page), graphic element and instances of enabling information. The instances of enabling information measure was based on categories created by Rossow and Dunwoody.[25]

An enabling opportunity is an instance in the story when the reporter could have provided information the reader would need to get involved with or act further on the subject of the story. Each enabling opportunity was evaluated based on category and extent.

The categories of enabling opportunities included references to:

- Governmental sources, including elected and non-elected officials, governmental departments, legislation (bills, ordinances), judicial proceedings, documents and government-sponsored activities such as meetings and hearings.
- Industry sources, including businesses, industry-organized consortiums, industry spokespersons, documents and events (both scheduled and unscheduled).
- Environmental sources, including advocacy groups, environmental consortiums, documents produced by any of the above, events and activities sponsored by environmentalists, and individuals who identify themselves as environmentalists.
- Expert sources, including individuals, often seen as "objective," who are called on because of their expertise in the area at issue and are not members of the above three groups.

---

[25] Rossow and Dunwoody, "Inclusion of 'Useful' Detail in Newspaper Coverage," 87-100.

- Citizen sources, including individuals not belonging to any of the above groups but who have a stake in the issue.
- The category of "other" was also included but use was discouraged. The extent of information provided in the enabling opportunity was still recorded.

The extent of the enabling opportunity was measured in three degrees:

- Complete enabling information allows the reader to act on the issue without any outside references. Such instances include complete addresses, phone numbers and a meeting's time, date and location.
- Partial enabling information allows the reader to act on the issue with further assistance, such as from a telephone book, directory assistance or librarian. Such instances include business or agency names, a person's name or title of a book.
- Nonexistent enabling information is an enabling opportunity that provides the reader with no information to follow up on. References include "scientists" or "an industry spokesperson."

Reliability

Three coders (including the author) examined a 10 percent sample of the stories. Reliability, established on the basis of percentage of agreement, ranged from 100 percent for article location identification to 82 percent identification of overall enabling information, taking both category and extent into account. The intercoder reliability for the enabling information category ranged from 89 percent for overall expert enabling information to 73 percent for identification of overall “other” enabling information. This reliability involved complex decision-making by the coders: they had to first identify it as an enabling opportunity, then identify the category of the opportunity, and then identify the extent of that opportunity.

Overall intercoder reliability of 89.8 percent was achieved. The remainder of the sample was coded by the author and one other coder.

RESULTS

To view the differences in actual enabling information used in the two samples, complete and partial enabling information was collapsed. Nonexistent enabling opportunities were viewed separately.

The two samples of stories were found to have relatively the same of number of instances of complete, partial and nonexistent enabling opportunities. Sources used as enabling opportunities were also relatively similar between the two groups. There was some significance found in the look at graphic elements used with the stories; while non-SEJ newspapers were more likely to include photos, stories written by SEJ members contained more graphics, tables, maps and illustrations, graphics that take more planning and staff time. Finally, there was little difference between the percent of enabling information found when comparing the front and inside pages of the two samples. A difference, though not significant, was found in the number of stories placed on the front and inside pages; stories written by members of SEJ were more often placed on the cover of a section than on the inside pages.

1. Membership as indicator of enabling opportunities. In regard to the first expected outcome, membership is not an indicator for increased enabling information. The overall difference between the total number of complete, partial and nonexistent enabling opportunities found in the two samples was not significant, as demonstrated in Table 1. The non-SEJ stories actually had a higher number of complete and partial enabling opportunities (33 and 1195) than the SEJ stories (20 and 1175). Conversely, SEJ stories contained more instances of nonexistent enabling information (530) than the non-SEJ stories (419).

Table 1. Total number of enabling opportunities comparing stories by members of SEJ with stories in newspapers with no SEJ members, with special attention to legitimacy of sources

		Enabling opportunity type			
		total complete/partial[B]	complete	partial	**nonexistent**[C]
SEJ[1]			**20**	**1175**	**530**[A]
	gov.	817	11	806	300
	expert	66	1	65	46
	industry	133	2	131	82
	env.	117	4	113	54
	citizen	62	2	60	48
Non-SEJ[2]			**33**	**1195**	**419**[A]
	gov.	799	12	787	233
	expert	58	1	57	23
	industry	130	5	125	60
	env.	147	13	134	40
	citizen	94	2	92	63

[1] Total number of enabling opportunities found in a sample of 116 stories.
[2] Total number of enabling opportunities found in a sample of 115 stories
[A] df=3 $x^2=4.351$ p<ns (5.99 needed to reach $p<.05$)
[B] df=4 $x^2=13.801$ $p<.01$
[C] df=4 $x^2=8.369$ p<ns (9.49 needed to reach $p<.05$)

*2. **Membership as indicator of source choice.*** In regard to the second expected outcome, membership is an indicator of sources connected with partial and complete enabling information, though not with sources connected with nonexistent enabling information. When looking at the sources of enabling information (partial and complete), both samples were most likely to include governmental information (Table 1). While the SEJ stories used industry sources the second most often (133), non-SEJ stories included environmental sources second most often (147). While SEJ stories used citizen sources the least often (62), non-SEJ stories used expert sources the fewest number of times (58). These differences were found to be significant when partial and complete opportunities were collapsed (df=4 $x^2=13.802$ $p<.01$). Differences between the nonexistent sources used in stories from the two samples were not found to be significant.

*3. **Membership as indicator of graphics use.*** In regard to the third expected outcome, membership is not an indicator for the number or type of graphics used (Table 2). In an analysis of the graphic elements used by the newspapers, photos most often accompanied non-SEJ stories (5.75%). Stories by SEJ membership included more graphs, tables, maps and illustrations (15%) than non-SEJ stories (8.7%). The differences between SEJ and non-SEJ stories for five graphic categories, though, were not significant. In fact, the total number of graphics used by each group was quite similar — 34 graphics in 116 SEJ stories and 31 graphics in 115 non-SEJ stories.

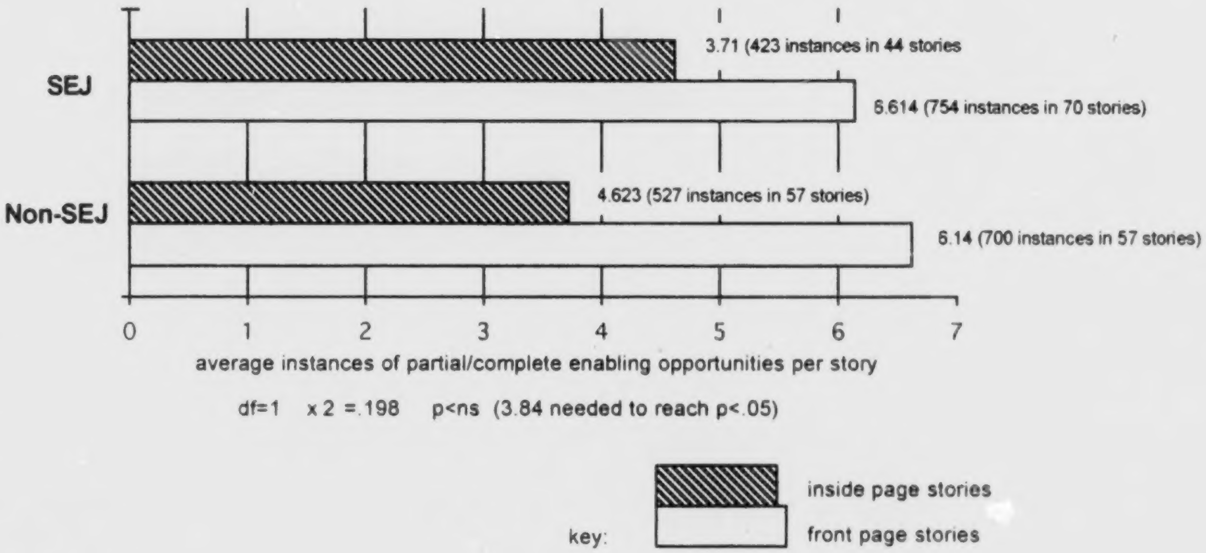
Table 2. Analysis of graphic elements used in stories by members of SEJ compared to stories in newspapers with no SEJ members[1]

	SEJ	Non-SEJ
photo	15	20
highlight box	1	1
graph/table	4	2
map/other illustration	14	8

[1]df=3 $x^2=3$ p<ns (5.99 needed to reach p<.05).

*4. **Membership as indicator of placement of enabling information.*** In regard to the fourth expected outcome, membership was not an indicator of preferential placement of water quality stories. When looking at the number of enabling opportunities included in stories on front pages of sections compared to inside pages, there was little difference between SEJ and non-SEJ stories. Stories on the front pages did include more partial and complete enabling opportunities (collapsed into one), with 6.614 per story for SEJ articles and 6.14 per story for non-SEJ articles. Inside pages included an average of 3.71 instances per story for SEJ articles compared to 4.623 instances for non-SEJ articles. The differences were not significant.

Table 3. Average number of partial and complete enabling instances per story, comparing front and inside pages of SEJ and non-SEJ newspapers



One of the most interesting findings was the number of SEJ stories placed on front pages compared to non-SEJ stories placed on front pages. SEJ stories in the sample were on the cover 70 times and inside 44 times, compared to 57 stories in the sample on the cover and 57 stories on the inside pages of the non-SEJ newspaper. While this finding is not significant (df=1

$x^2 = .104$ $p <$ ns), future studies could better explore this difference.

DISCUSSION

Overall, this study found little support for the hypothesis that membership in the Society of Environmental Journalists is an indicator of increased concern for the environment and environmental issues.

Enabling Information and Sources

This study found little difference between the amount of partial and complete enabling information presented in the two samples. Rossow and Dunwoody found that editors' beliefs about environmental issues impacted partial and complete enabling information. Therefore, if SEJ membership indicated personal or perceived public concern for the environment, an increase in partial and complete enabling information in stories by members of SEJ would have been expected. Instead, it was found that SEJ members actually included less partial and complete enabling information than reporters who are not members.

When looking at the frequency of sources sited for partial and complete enabling information, the results for governmental sources followed previously found patterns; of all complete and partial enabling information, SEJ members cited governmental sources 68% of the time and non-SEJ reporters cited governmental sources 65% of the time. If membership indicated personal or perceived public concern for the environment and therefore influenced the choice of sources, it would be expected that more environmentalists and citizens — significant stakeholders who are routinely viewed as less legitimate news sources — would be included in stories written by SEJ members. Just the opposite was found. Environmental sources dominated the non-SEJ complete information category (environmental 39%, governmental

36%). In contrast, complete enabling information was provided in SEJ stories by the government (55%) almost three times as much as by the environmental sources (20%).

Citizens were most disenfranchised by the SEJ reporters (5% of all complete and partial) whereas experts, considered a legitimized source, were least often mentioned in non-SEJ stories (8%). Even in nonexistent enabling opportunities, SEJ members cited government most (57%) and citizens second least (9%). Non-SEJ reporters cited government most often (56%) and citizens second most often (15%).

These findings show little support for the hypothesis that membership influences what gets printed in the newspaper. It could be that the strength of journalistic routines outweighs any effect membership would have on the story. A second explanation could be along the lines of what Patterson and Donsbach found,[26] that journalists with strong beliefs, in this case importance of environmental information, may not seek out such reporting assignments.

But a third explanation could be that journalists don't have the power to guarantee any differences they may include in their stories make it to print. Rossow and Dunwoody found differences in enabling content when editors perceived personal or public concern on the issue. Much of the choice about what gets printed in the newspaper is made by editors, not reporters. Since it has been found that enabling information is usually considered "dull" by editors and reporters,[27] it is most likely to come at the end of a story and be cut for space.

The difference in findings between this study and that by Rossow and Dunwoody could also be explained by the difference in sample. Rossow and Dunwoody included analysis of editorials, while editorials were discarded from this study because they lacked a byline and therefore couldn't be distinguished as SEJ or non-SEJ. Editorials have more freedom to include enabling information and create a distinguishable call for action, along with the information needed to act.

---

[26] Patterson and Donsbach, "News Decisions," 466.

[27] James B. Lemert, Barry N. Mitzman, Michael A. Seither, Roxana H. Cook and Regina Hackett, "Journalists and Mobilizing Information," *Journalism Quarterly* 54: 721-726 (Winter 1977).

The fact that experts are not often connected with enabling information was also found by Rossow and Dunwoody.[28] They provided no explanation for this phenomena. It could be that due to the technical nature of many environmental issues, those on all sides of the issue — governmental officials, environmentalists, industry — have enough nuts-and-bolts information to fill the story. The reporter does not have to this seek out this information, and objective experts are therefore unnecessary. It may also be that many of the "experts" belong to the previous categories: a state wildlife biologist, an attorney for an environmental group, a researcher for an oil company. They all speak for a side of the debate (and are therefore not entered in the "expert" category), even though their statements may be more expert than that of the governor, an environmentalist or a CEO.

Graphics

The differences in use of graphic elements was slight but insignificant and does not lend to the hypothesis that membership influences product. A look at graphics is important because graphics demonstrate more newspaper resources going toward the story. Graphics also tend to draw readers to the specific story. The actual role of the reporter, though, in determining the graphic element must be considered. Often, it is the editor who decides and assigns the graphic.

---

[28] Rossow and Dunwoody, "Inclusion of 'Useful' Detail in Newspaper Coverage," 97.

It may be that the quality of the story impacts the inclusion of a graphic, and therefore the reporter has an indirect influence of use of graphics. A future study could code for mobilizing information within the graphic or its cut line (which was not counted in this study) may illustrate any connections between the enabling content of the story and that of graphics used.

Placement

Stories on the front page are more visible than those on the inside, and therefore have a greater chance of being read by the public. It is important, then to evaluate the enabling information most readily available to the reader. Stories appearing on the front pages do include more enabling information than those on inside pages, but the differences between the two sample groups were not significant and show an overall trend regardless of membership. This finding also does not support the hypothesis of membership as influencing product.

The number of stories appearing on front versus inside pages may be an interesting avenue of further study. The relatively small sample size may have prevented the differences found here from being significant (70 SEJ front-page stories versus 57 non-SEJ front-page stories). A larger sample may demonstrate more conclusive results, but the question of the reporter's influence on page choice still needs to be answered. Again, it appears the editor would have a greater influence over placement than the reporter. The quality of the story may illustrate the reporter's impact on placement, but quality cannot be determined from the measures used here.

Other Explanations

When this study was initially approached, it was to look at editors and the effect of membership on environmental reporting in their newspapers. In 1993, SEJ was just three years old. The sample of SEJ-member editors was too small to study, and therefore the parameters needed to be increased to include all journalists with SEJ membership. As discussed above, editors may have more control that reporters over some of the measured factors. This influence of editors may also explain the findings of Rossow and Dunwoody. As SEJ membership continues to diversify and grow, it is possible such a study looking specifically at SEJ-member editors could be done in the future.

It is also possible that more comprehensive results could be gained from looking at a wider variety of environmental issues. Certain issues — like water quality — inherently have more key governmental players than issues of energy production or recycling, which would be more industry or citizen-oriented. For example, one story coded in this study had over 30 partial and complete governmental enabling opportunities, since the fight was over state versus federal regulation of California water supplies.

The study sample was drawn from Lexis-Nexis, and therefore was limited to selected newspapers. A quick look at newspapers added to the database after 1993 shows that a sample drawn from a timeline after 1995 would yield a greater variety of newspapers, and therefore create a more representative sample of the differences in membership versus non-membership.

Finally, a survey of member and non-member environmental reporters to ascertain their attitudes toward environmental issues, sources and enabling information is needed to verify the results found in this purely quantitative study. This study found no concrete evidence of influence of membership on story sources, enabling information, placement or graphic use. It may be that there are other factors not measured in this study that could be identified to indicate influence. A survey could back into this study — measure if indeed there is a difference.

If a difference is found, it is possible that different indicators should be evaluated in a quantitative analysis of the stories. If no difference is found in the survey results, it would verify the results of this study. Therefore, membership as indicator of belief cannot be completely ruled out, but only said that this study provided no support for such a hypothesis.

Media Ethics
TD

Press, Privacy and Presidential "Proceedings": Moral Judgments and the Clinton-Lewinsky Affair

Jennifer L. Lambe
Ph.D. candidate,
School of Journalism and Mass Communication

Christina L. Fiebich
Ph.D. student
School of Journalism and Mass Communication

Darcia Narvaez, Ph.D.
Educational Psychology and Curriculum & Instruction

University of Minnesota

Address correspondence to:
Jennifer L. Lambe
School of Journalism and Mass Communication
111 Murphy Hall, 206 Church St. SE
University of Minnesota
Minneapolis, MN 55455
Phone: (612) 624-5038
Fax: (612) 626-8012
E-mail: lambe010@tc.umn.edu

Paper submitted for presentation at the August, 1999 Convention of the Association for Education in Journalism and Mass Communication in New Orleans, LA.

Press, Privacy and Presidential "Proceedings": Moral Judgments and the Clinton-Lewinsky Affair

ABSTRACT

This exploratory study examines the relationship between levels of moral judgment and various attitudes towards the Clinton-Lewinsky affair and subsequent impeachment proceedings. Trends suggest that individuals with higher levels of moral reasoning take a more systemic view of political controversies. Expectations about Presidential competence and character are found to be highly correlated with attitudes concerning the private lives of public officials. Both demographic characteristics and attitudinal variables are shown to be associated with the level of blame assigned to the news media in shaping the Clinton-Lewinsky situation.

Press, Privacy and Presidential "Proceedings": Moral Judgments and the Clinton-Lewinsky Affair

Research in mass communication and political science has provided strong evidence that negative information carries more weight than positive information (Garramone, *et. al.*, 1990; Thorson, *et. al.*, 1991; Perloff & Kinsey, 1992; Ansolabeher, *et. al.*, 1994), that trait evaluations affect overall evaluations (Campbell, Gurin, and Miller, 1954; Markus, 1982; Johnston, *et. al.*, 1992), that scandal has a negative impact on evaluation (Abramowitz, 1988, 1991; Funk, 1996), and that by emphasizing certain traits or issues news coverage can prime audience attitudes (Graber, 1972; Iyengar, Peters, & Kinder, 1982; Iyengar & Kinder, 1987; Kahn and Geer, 1994). The predictions made by this research, however, seem to be completely contradicted by public opinion about the Clinton-Lewinsky scandal.

"The Lewinsky affair is a case study in what can happen when maniacally commercial media report the bitter feuds of a political system divided by ideological quarrels, and do so as a form of entertainment" (Hodgson, 1998, p. 65). From the beginning of the scandal, the American political system – usually hypersensitive to public opinion – systematically defied polls showing a substantial majority of the public was against impeachment. Regardless of the constituency polled – 1998 congressional election voters, likely voters, registered voters, or the entire electorate – the majority, between 63 percent and 75 percent, opposed impeachment (Maidment, 1999). After the House voted to impeach, the President's approval ratings rose sharply even in the wake of embarrassingly private details about his relationship with Monica Lewinsky.

Public sentiment about the affair was best characterized as indifferent. To paraphrase a cliche as Chang and Kraus (1990) did – "If an event is reported in the mass media but no one cares to read, listen, or watch, does it become news?" (p. 99). In the case of the Clinton-Lewinsky affair, intimate details were published on the Internet and in virtually every newspaper and public affairs magazine in the country. The story also received a great deal of coverage by broadcast news organizations – but the public just didn't seem to care. Although half of the American public reported having read or heard at least part of the Starr report, interest in the scandal coverage was around only 32 percent throughout 1998.[1] According to a study by the Pew Research Center for the People and the Press, 64 percent of the public believed the media gave the story too much attention.[2] When asked why they didn't follow the impeachment trial more closely, almost half said they had not paid more attention because the trial will have no impact on Clinton.

News reports suggested that the public was taking a "non-moralizing" stance with regard to the Clinton-Lewinsky affair. While that may have been true for evaluations of Clinton's extra-marital dalliances, members of the public were certainly making moral judgments about the actions of other participants in the matter. Linda Tripp was criticized for manipulating and betraying a friend. Republican leaders of the House of Representatives were denounced for directing a tainted partisan campaign to oust the President. Kenneth Starr was condemned for abusing the power the power of the Independent Counsel's office in conducting the investigation, and accused of leaking information to the media. Members of the public were also critical of the media's performance in covering the scandal. A February 1999 poll by the Pew Research Center for the People and the Press reports that since the mid-1980s "the number of Americans seeing news organizations as immoral has tripled, leaving the public evenly split, 38 percent to 40 percent, on whether the press is immoral or n ..."[3]

---

[1] September 17, 1998 poll by The Pew Research Center for the People and the Press reported 48% read or heard at least part of the Starr report: 28% newspaper; 15% television; 11% online; 2% magazine; 2% somewhere else. Interestingly, television network sites were the number one choice of the 20 million Americans who read the report online.

[2] December 14, 1998 poll by The Pew Research Center for the People and the Press.

The Clinton-Lewinsky affair provides a rich context for examining moral dimensions of public opinion toward players in the political system. Public sentiment about the matter runs counter to traditional expectations, and the situation offers a mixture of ethical considerations for a variety of key players in the political process. In this exploratory study, we will examine the relationship of a general measure of moral judgment to attitudes toward the Clinton-Lewinsky situation in particular. We will look at how trait expectations for the President are related to attitudes about the private lives of public officials. Finally, we will examine which demographic and attitudinal characteristics are associated with an increased level of blame for the media's role in the Clinton-Lewinsky controversy.

Moral Judgment and Political Attitudes

The study of moral development from the perspective of cognitive psychology has focused on understanding the stages that people progress through as their level of moral reasoning becomes more sophisticated. An on-going line of research in this field explores the relationship of a person's level of moral judgment to their political and social attitudes. The findings suggest that moral judgment is often a valid and reliable predictor of such attitudes (see Rest, Narvaez, Thoma and Bebeau, 1999; Thoma, Rest and Barnett, 1986).

---

[3] February 25, 1999 poll by The Pew Research Center for the People and the Press.

The Defining Issues Test (Rest, et. al., 1998) is a paper-and-pencil measure of moral judgment. It presents six dilemmas, each followed by a list of possible considerations in resolving the dilemma, which are rated and ranked for importance by the participant. Although the stages of moral thinking reflected on the DIT were inspired by Kohlberg's initial work, the DIT is not tied to a particular philosophical ethic. A new index on the DIT, the N2-score, represents the amount of postconventional (higher) moral reasoning preferred by the respondent and the rejection of lower stage reasoning. The validity trends for N2 are even stronger than those for the most widely used index, the P-score (see Rest, Thoma, Narvaez, & Bebeau, 1997, for a discussion of the seven validity criteria). The DIT was used in this study to assess levels of moral judgment.

Trait Evaluations: Character and Competence

Much of what we remember about others consists of trait judgments. "People are quick to infer traits from even minimal information about others; clues about a person's trait qualities are taken from such things as physical appearance, verbal and nonverbal behaviors, group membership such as sex, race, geographic origin, and partisan activities" (Funk, 1996, 3). Trait judgments about politicians are also made from ideological and issue-position information found in news coverage.

Party leaders are typically assessed using trait language – intelligence, knowledge, leadership, trustworthiness, morality, compassion. Trait assessments about political figures are often divided among competence and character traits (Johnston, *et. al.* 1992). Competence is usually defined as intellectual and leadership abilities, and character as integrity and empathy. They are each distinct and important predictors of overall evaluation.

For Clinton, the public seems to have weighed issues of competence more heavily than character traits. An August 27, 1998 poll by The Pew Research Center for the People and the Press demonstrates this point. 62% of Americans responded that they didn't like Clinton as a person, up from 53% in early February 1998 when the scandal was first unfolding. However, when asked in an open-ended format why they continue to support the president despite their views of him personally, 34% cited the good economy, 18% noted foreign policy dealings, and 14% explicitly mentioned that Clinton's private conduct is distinct from his ability to lead the nation.

Funk (1996) found that trait judgments play an important, direct role in evaluation of public officials. Her findings suggest that media coverage surrounding a scandal is more likely to influence those with lower levels of political knowledge because they seem to weight the valence of salient information more heavily. Individuals high in political knowledge weighted competence qualities higher. Kimball (1995) also found that an individual's level of political knowledge and sophistication substantially effect their responses to current events. These two findings suggest that level of political sophistication will have an effect on both evaluation of media coverage and trait evaluation of those covered in the news. This study asks respondents for trait evaluations of President Clinton, and also measures levels of political knowledge.

Public Officials and Private Lives

From a legal perspective, the U.S. media have wide leverage in reporting on the private lives of public officials. Courts have reasoned that accepting an elected position entails relinquishing some degree of personal privacy. Media ethicist John C. Merrill suggests that "the right of privacy – the right of a person to be let alone—immediately comes into conflict with the First Amendment's press freedom clause. It also comes into conflict with the right of the people to know" (Gordon and Kittross 1999, 161).

But the press may be giving people more than they *want* to know about the private lives of elected officials. In 1998 the Pew Research Center for the People and the Press released a study entitled "Scandal reporting faulted for bias and inaccuracy: Popular policies and unpopular press lift Clinton ratings." They found that fully 66 percent of respondents believe coverage of the personal and ethical behavior of political leaders is "excessive." This study explores whether people's relative emphasis on character versus competence traits, as described above, predicts their attitudes toward limiting media coverage of public officials' private lives.

Blaming the Messenger?

Public dissatisfaction with press performance is not limited to criticism of its handling of the Clinton-Lewinsky affair. Rather, complaints about the coverage of the scandal just reinforce the public's already critical view of press practices and add to public distrust of the media's ability to fulfill its traditional watchdog function with respect to government wrong-doing. Today, a narrow majority of 55 percent of the public believes that press criticism "keeps political leaders from doing things that should not be done," down over 11 percent from 1994 (Pew, 1998). In fact, the public is divided with 45 percent believing the news media protects democracy while 38 percent believe it actually hurts democracy.[4] This research examines demographic and attitudinal predictors of negative evaluations of the press, in terms of blame for the Clinton-Lewinsky situation. We believe Schoenbach & Baran are correct that "the evaluation of those in charge of producing media messages is an important mediating factor in the media effects process" (1990, p. 97).

Research Questions

Public attitudes about the Clinton-Lewinsky affair offer a unique opportunity to explore a variety of moral dimensions related to the media, the presidency and privacy. As this is an exploratory study, no formal hypotheses were generated. Rather, we developed three research questions to guide our analyses.

> **RQ1: What is the relationship of moral judgment to attitudes about the Clinton-Lewinsky scandal?**
>
> **RQ2: What is the relationship between trait expectations of the President and attitudes about covering the President's private life?**
>
> **RQ3: What respondent characteristics are related to blaming the media for its role in Clinton-Lewinsky scandal?**

Method

One hundred and twenty four undergraduates in a beginning journalism course participated in the study for extra credit. Due to incomplete responses and failure to pass subject reliability tests on the DIT, ninety-one participants were included in the analysis (average age, 21). The students completed the Clinton-Lewinsky questionnaire first and then the DIT. Most students were finished in 60 minutes.

Questionnaire. A questionnaire was developed that included 55 questions relevant to the Clinton-Lewinsky-Starr scandal. The full questionnaire is located in Appendix B. Participants responded to most questions with a 5-point Likert-type scale (Strongly agree,

---

[4] February 25, 1999 poll by The Pew Research Center for the People and the Press.

Agree, Neutral, Disagree, Strongly Disagree). Questions included (sample items are given in parentheses): Journalist responsibilities ("It is appropriate for newspapers and magazines to publish material of a sexual nature if it is part of an official government report"); Media coverage ("There has been too much media attention paid to the President's relationship with Monica Lewinsky"); Public mood ("I am proud to be an American"); Reactions to the participants in the scandal ("I am ashamed of President Clinton's actions;" "Kenneth Starr, the independent counsel, has gone too far with his investigation of President Clinton;" "Monica Lewinsky should be condemned because she was the aggressor in the relationship;" "I am ashamed of the House of Representatives for making this a partisan issue"). A similar Likert-type scale was used to ask about perceptions of harm to the nation done by scandal or misbehavior by Presidents Clinton, Reagan, Nixon, Kennedy, and Harding ("How harmful were these Presidents' behaviors to the nation?: President Nixon – Watergate break- in and cover-up").

In a question about the amount of blame among the participants in the scandal, subjects distributed blame among the scandal participants, which had to total 100%. Political knowledge questions were short answer ("What job or political office is now held by Al Gore?"). Questions of expectations for the presidency were multiple choice ("Which is most important in rating how a President is doing his job? Moral Values, Position on issues, or Ability to manage the Government." And "Which is more important? Pick one. That a President be a moral role model, That a President do his job effectively, or Both.") Political affiliation was measured on a 5-point scale (Democrat, Independent but leaning Democrat, Independent, Independent but leaning Republican, Republican). Knowledge of current events and media use were assessed through self-reported estimates ("How would you describe yourself in terms of being informed about news events?" "How often do you read/watch/listen to the news media?")

Results

RQ1: *Moral judgment and attitudes toward the Clinton-Lewinsky scandal*

The first research question explores the relationship of moral judgment to a range of attitudes about the Clinton-Lewinsky scandal. The data were analyzed by examining the relationship of the DIT's N2 index with the other items included on the survey. Generally, an undergraduate sample such as the one in this study provides sufficient variance on the N2 score to divide the sample into 6 groups. The data collected here, however, were skewed toward the lower end of the N2 scale. Therefore we collapsed the top three groups into one, leaving only 4 N2 groups.[5] The restriction of variance may have attenuated our findings. While we find interpretable trends, none achieve statistical significance. Still, the observed relationships may provide some guidance for future research.

Higher scores on the moral judgment measure (N2 groups) are related to decreased blame for the Clinton-Lewinsky situation being attributed to Clinton personally (see Graph 1). Additionally, those in the higher N2 groups were more likely to agree that Clinton should be sanctioned, but not impeached, for his behavior (Graph 2), whereas the subjects in the lower N2 groups were more likely to support impeachment (Graph 3). Increased blame for Starr and for the media is also related to higher N2 scores (Graphs 4 & 5).

---

[5] This finding also effects the results of research question 3.

In terms of attitudes about the role of the media in the scandal, those with higher moral judgment scores are more likely to agree that too much attention has been given to the situation (Graph 6). They are also *less* likely to agree that the sex lives of public officials should be open to scrutiny, whereas subjects in the lower N2 groups are more likely to agree with this statement (Graph 7). Subjects with lower moral judgment scores are also more likely to support journalists pursuing reports about the sexual liaisons of public officials (Graph 8). Those with higher N2 scores, however, were also more likely to agree that it is appropriate for the print media to publish material of a sexual nature if it is part of a government report (Graph 9).

RQ2: *Presidential expectations and perceptions of privacy*

The second research question explores the relationship between trait expectations of presidents and perceptions of the public and private dimensions of presidential life. Subjects were asked to indicate whether it was more important for a President to (1) be a moral role model; (2) do the job effectively; or (3) both. Only 2 people said that the most important trait for the President is to be a moral role model, so for the purposes of analysis they were combined with those who selected "both." This creates a dichotomous variable; split between those who believe moral leadership is an essential component of the President's role and those who do not. Independent sample t-tests were then conducted with items that assessed attitudes about presidential privacy (see Table 1).

Items assessing general attitudes about the distinctions between public and private lives (e.g. "I believe an individual's personal life should NOT affect his or her professional life"), items asking for blanket statements concerning the public's right to know about the private lives of public officials (e.g. "Journalists should pursue reports about the sexual liaisons of public officials"), and items asking specifically about the Clinton-Lewinsky scandal (e.g. "There has been too much media attention paid to the President's relationship with Monica Lewinsky") all distinguish between the trait expectation groups described above. Those who indicate that the most important trait expectation for a president is job effectiveness alone appear to also draw a line between the public performance and the private behavior of elected officials in general, and of Clinton in particular. However, those who expect moral leadership from a president also believe the public has a right to know about the private actions of their elected officials.

One alternate explanation for these findings is that the trait expectation item is essentially serving as a substitute for political party, and that subjects are just revealing their partisan biases about the Clinton-Lewinsky affair. A t-test on party affiliation does show a statistically significant relationship with trait expectation group, with Republicans more likely to belong to the group that expects moral leadership ($p< .05$). In order to test the robustness of the relationship of the privacy items with the trait expectation item in regard to party affiliation, partial correlations were run. The relationships do remain significant at or below the .05 level even after controlling for party affiliation.

RQ3: *Media blame and respondent characteristics*

The final research question examines the relationship between the level of blame assigned to the media for the Clinton-Lewinsky scandal, and demographic and attitudinal characteristics of the respondents. Participants were asked to distribute the percentage of blame they would assign to each of seven actors involved in the situation, including "the media." For the purposes of this analysis, subjects were grouped into "no blame" (assigned 0% of the blame to media, N=39), "medium blame" (assigned 1-19% of the blame to media, N=38), or "high blame" (assigned more than 20% of the blame to media, N=45) segments. Zero-order correlations were then examined (see Table 2).

Two demographic characteristics, higher levels of political knowledge and moral judgment, were significantly related to increased blaming of the media. Political party, college major and sex were not significantly related. Age, which one would speculate to have predictive power, was not a significant predictor of media blame, perhaps because the homogeneous nature of the sample restricts any possible relationship.

In terms of attitudinal variables, several categories of items were significantly related with levels of media blame. Those who placed less blame on the media also were more concerned with protecting the privacy of public officials generally. Additionally, those who were more likely to blame the media were also more likely to have negative attitudes about the work of Independent Counsel Kenneth Starr. Perhaps not surprisingly, then, higher levels of media blame were also associated with an increased support for Bill Clinton and his policies.

Discussion

The results of this exploratory study suggest that examining the moral dimensions of audience attitudes towards political and social issues and events may provide insight into the complex arena of political public opinion. The direction of relationships of attitudes about the Clinton-Lewinsky affair reinforce the notion that those with higher levels of moral reasoning will take a more systemic view of political controversies. Similarly, people who score high on measures of moral judgment seem to draw distinctions between media coverage of public and private behavior of elected officials. This study also suggests that blame of the media for its role in the political process is more likely to come from individuals with greater political knowledge and higher levels of moral judgment. This has meaningful implications for members of the media interested in rebuilding credibility with the public.

Further, an examination of trait expectations for presidents also suggests that – above and beyond partisan ties – individuals who consider moral leadership to be an essential presidential quality are also more likely to agree that media coverage of public officials' private lives is warranted.

The results of this study are clearly limited by the homogenous make-up of the student sample, and by the restricted variance obtained on the measure of moral judgment. However, the findings do suggest that exploration of the moral dimensions of public opinion about current political and social issues can be a useful endeavor. Future research with a more representative population, and in relation to a variety of political situations would help to specify the connection between moral judgment and political attitudes.

References

Ableson, R. P., and Rosenberg, M. J. (1958). Symbolic psycho-logic: A model of attitude cognition. *Behavioral Science*, 3, 1-13.

Abramowitz, A. I. (1988). Explaining Senate election outcomes. *American Political Science Review*, 82, 385-403.

Abramowitz, A. I. (1991). Incumbency, campaign spending, and the decline of competition in U.S. House elections. *Journal of Politics*, 53, 34-56.

Ansolabeher, S., Iyengar, S., Simon, A., and Valentino, N. (1994). Does attack advertising demobilize the electorate? *American Political Science Review*, 88 (4), 829-836.

Blanks-Hindman, E. (1992). First Amendment theories and press responsibility: The work of Zechariah Chafee, Thomas Emerson, Vincent Blasi and Edwin Baker. *Journalism Quarterly*, 61 (1), 48-64.

Brady, H. E., and Johnston, R. (1986). What's the primary message: Horse race or issue journalism. In *Media and Momentum: The New Hampshire Primary and Nomination Politics*. G. R. Orren and N. W. Polsby (eds.) Chatham, NJ.

Campbell, A., Gurin, G., and Miller, W. E. (1954). The Voter Decides. *Evanston, IL:* Row, Peterson.

Chang, T. K., and Kraus, S. (1990). News for the other person: Editors' processing of readers' interest. In Sidney Kraus (ed.) *Mass Communication and Political Information Processing*, 99-112.

Enelow, J. M., and Hinich, M. (1984). *The Spatial Theory of Voting: An Introduction*. New York: Cambridge University Press.

Fiorina, M. (1981). *Retrospective Voting in American National Election.* New Haven, CT: Yale University Press.

Funk, C. L. (1996). The impact of scandal on candidate evaluations: An experimental test of the role of candidate traits. *Political Behavior*, 18 (1), 1-24.

Garramone, G. M., Atkin, C. K., Pinkleton, B.E., and Cole, R.T. (1990). Effects of Negative Political Advertising on the Political Process. *Journal of Broadcasting and Electronic Media*, 34 (3), 299-311.

Gordon, A.D., and Kittross, J.M. (1999). *Controversies in Media Ethics*, 2d. ed. New York: Longman.

Graber, D. A. (1972). Personal qualities in presidential images: The contribution of the press. *Midwest Journal of Political Science*, 16 (1), 46-76.

Helle, S. (1991). Whether the public's right (not) to know? Milton, Malls, and multicultural speech. *Illinois Law Review,* 191, 1077-1100.

Hibbing, J. R., and Theiss-Morse, E. (1998). The media's role in public negativity toward congress: Distinguishing emotional reactions and cognitive evaluations. *American Journal of Political Science*, 42 (2), 475-798.

Hodgson, G. (March 1998). After Monica. *The World Today*, 54 (3), 64-65.

Iyengar, S. and Kinder, D. R. (1987). *News that matters*. Chicago: University of Chicago Press.

Iyengar, S., Peters, M. D., and Kinder, D. R. (1982). Experimental demonstrations of the "Not so minimal" consequences of television news programs. *American Political Science Review*, 76, 848-858.

Johnston, R., Blais, A., Brady, H.E., and Crete, J. (1992). *Letting the People Decide: Dynamics of a Canadian Election.* Stanford, CA: Stanford University Press.

Kahn, K. F., and Geer, J. G. (1994). Creating impressions: An experimental investigation of political advertising on television. *Political Behavior*, 16 (1), 93-116.

Kelly, S., and Mirer, T. (1974). The simple act of voting. *American Political Science Review*, 61, 572-591.

Kimball, D. C. (1995). *Public approval of Congress: To what extent do people respond to cues provided by current events and elite discourse?* Presented at the annual meeting of the American Political Science Association, Chicago.

Kuklinski, J., Riggle, E., Ottati, V., Schwarz, N., and Wyer, R. Jr. (1991). The cognitive and affective bases of political tolerance judgments. *American Journal of Political Science*, 35, 1-27.

Lau, R. (1986). Political schemata, candidate evaluations and voting behavior. In *Political Cognition*, ed. Richard R. Lau and David O. Sears. Hillsdale, NJ: Lawrence Erlbaum Associates.

Lau, R. (1989). Construct accessibility and electoral choice. *Political Behavior,* 11, 5-32.

Lau, R. (1995). Information search during an election campaign: Introducing a processing-tracing methodology for political scientists. In *Political Judgment*, ed. Milton Lodge and Kathleen M. McGraw. Ann Arbor: The University of Michigan Press.

Lodge, M., McGraw, K. M., and Stroh, P. (1989). An impression-driven model of candidate evaluation. *American Political Science Review*, 83 (2), 399-419.

Maidment, R. (February 1999). Failure in a flawed process. *The World Today*, 55 (2), 4-7

Marcus, G. E., and MacKuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87, 672-685.

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., and Wood. S. L. (1995). *With Malice Toward Some: How People Make Civil Liberties Judgments*. New York: Cambridge University Press.

Markus, G. B. (1982). Political attitudes during an election year: A report on the 1890 NES panel study. *American Political Science Review*, 76, 538-560.

Markus, G. B., and Converse, P. (1979). A dynamic simultaneous equation model of electoral choice. *American Political Science Review*, 73, 1055-1077.

Millar, M. G., and Tesser, A. (1989). The effects of affective-cognitive consistency and thought on attitude-behavior relationship. *Journal of Experimental Social Psychology*, 25, 189-202.

Paterson, T. E. (1980). *The Mass Media Election*. New York: Prager.

Perloff, R. M., and Kinsey, D. (1992). Political advertising as seen by consultants and journalists. *Journal of Advertising Research*, x (3), 53-59.

Pew Research Center for the People and the Press. (1998). *Scandal reporting faulted for bias and inaccuracy: Popular policies and unpopular press lift Clinton ratings*. Washington, D.C.

Rest, J., Narvaez, D., Thoma, S.J., and Bebeau, M. (1999). *Postconventional thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Erlbaum.

Rest, J., Thoma, S.J., Narvaez, D., and Bebeau, M.J. (1997). Alchemy and beyond: Indexing the Defining Issues Test. *Journal of Educational Psychology*, 89 (3), 498-507.

Schoenbach, K., and Baran, S. J. (1990). Mass media effects on political cognition: How readers' images of journalists shape newspaper impact. In *Mass Communication and Political Information Processing*, Sidney Kraus (ed.), 85-97.

Thoma, S.J., Rest, J., and Barnett, R. (1986). Moral judgment, behavior, decision making, and attitudes. In J. Rest. (Ed.) *Moral development: Advances in theory and research* (pp. 133-175). New York: Praeger.

Thorson, E., Christ, W. G., and Caywood, C. (1991). Effects of issue-image strategies, attack and support appeals, music, and visual content in political commercials. *Journal of Broadcasting and Electronic Media*, 35 (4), 465-486.

Wanta, W., and Foote, J. (1994). The president-news media relationship: A time series analysis of agenda-setting. *Journal of Broadcasting & Electronic Media*, fall, 437-449.

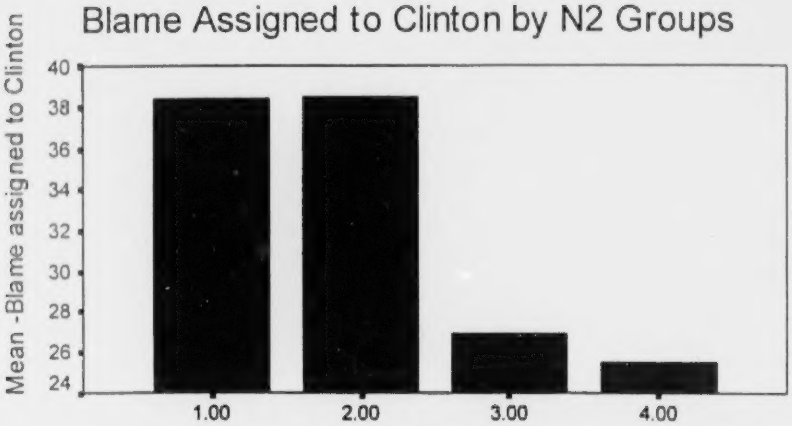
Wilson, T. D., Dunn, D. S., Kraft, D., and Lisle, D. J. (1989). Introspection, attitude change, and attitude-behavior consistency: The disruptive effects of explaining why we feel the way we do. *Advances in Experimental Social Psychology*, 22, 287-343.

Wilson, T. D., and Schooler, J. W. (1991). Thinking too much: Introspection can reduce the quality of preferences and decisions. *Journal of Personality and Social Psychology*, 60, 181-192.

Appendix A
Graphs and Tables

Graph 1:

Blame Assigned to Clinton by N2 Groups



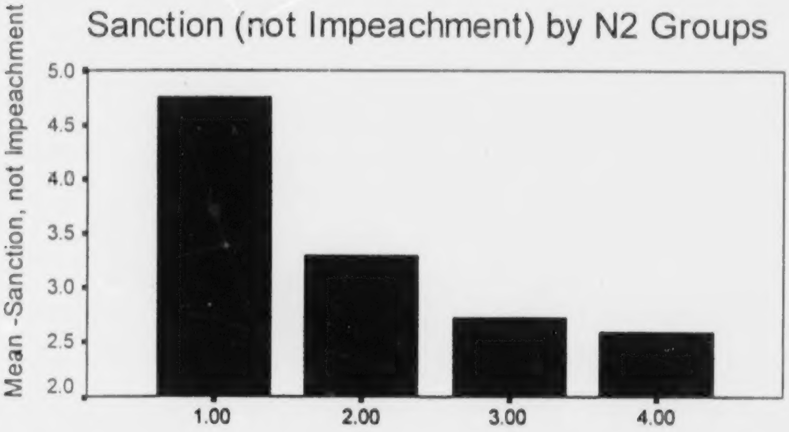
n2grp collapsed into 4 groups (4+5+6) together

Higher score indicates increased level of blame.

F=1.743, p<.164

Graph 2:

Sanction (not Impeachment) by N2 Groups



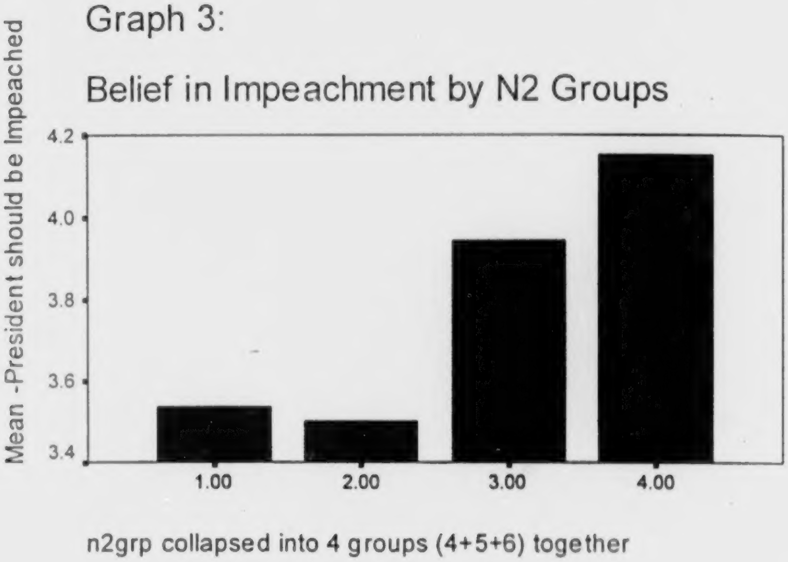
n2grp collapsed into 4 groups (4+5+6) together

Higher score indicates increased belief in sanction over impeachment.

F=1.411, p<.245

Graph 3:

Belief in Impeachment by N2 Groups

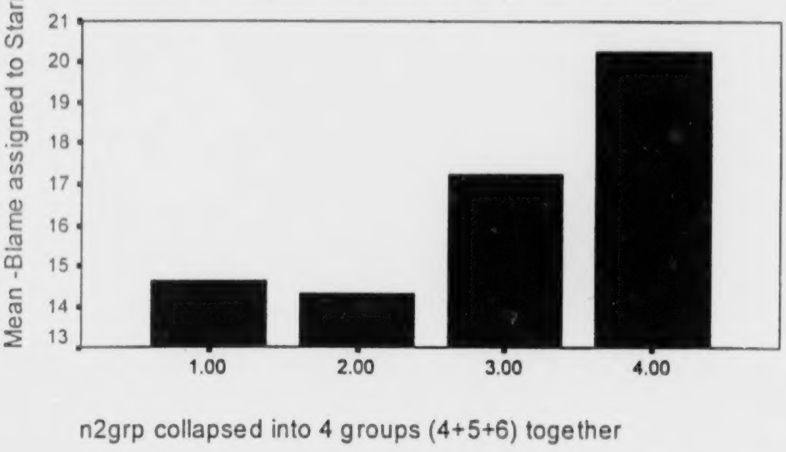


Higher score indicates increased belief in impeachment.

F=1.400, p<.248

Graph 4:

Blame Assigned to Starr by N2 Groups

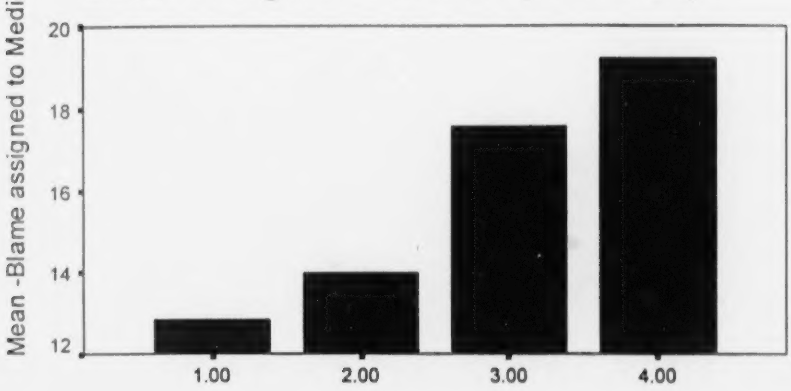


Higher score indicates increased level of blame.

F=.769, p<.515

Graph 5:

Blame Assigned to Media by N2 Group



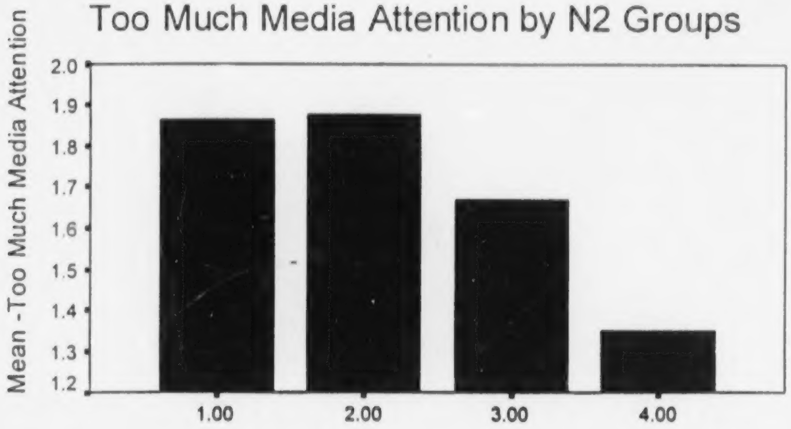
N2grp collapsed into 4 groups (4+5+6) together

Higher score indicates increased level of blame.

F=.714, p<.546

Graph 6:

Too Much Media Attention by N2 Groups



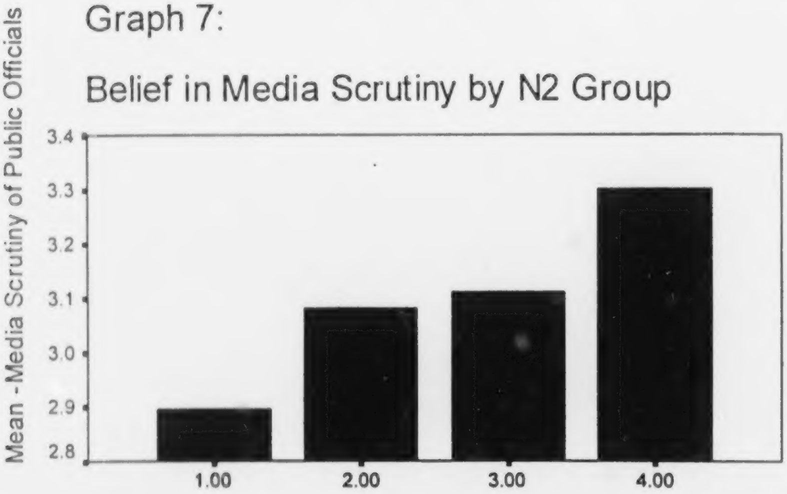
n2grp collapsed into 4 groups (4+5+6) together

Higher score indicates increased belief.

F=1.292, p<.282

Graph 7:

Belief in Media Scrutiny by N2 Group



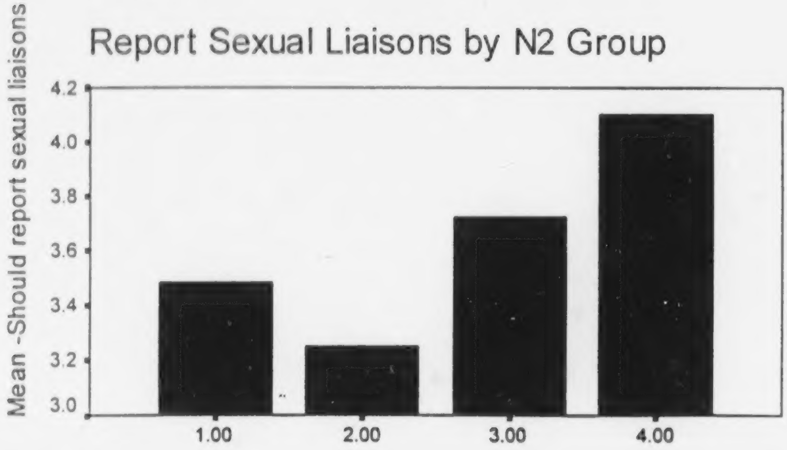
N2grp collapsed into 4 groups (4+5+6) together

Lower score indicates increased belief in public scrutiny in the media.

F=.480, p<.697

Graph 8:

Report Sexual Liaisons by N2 Group



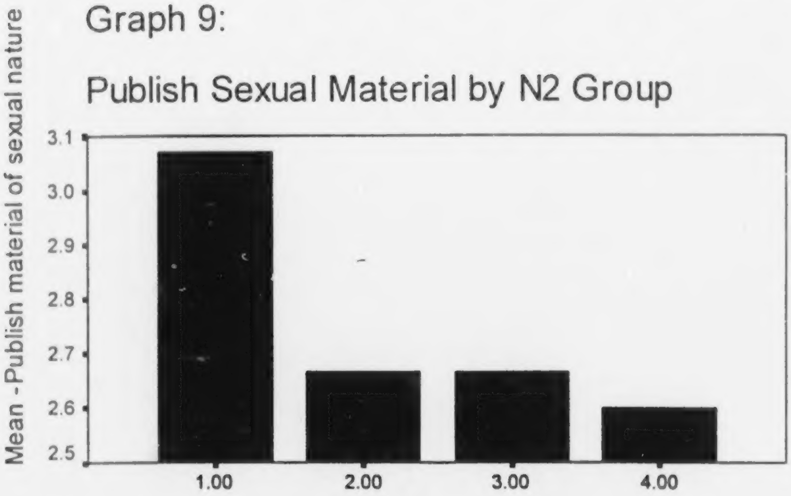
N2grp collapsed into 4 groups (4+5+6) together

Lower score indicates increased agreement in reporting.

F=2.679, p<.052

Graph 9:

Publish Sexual Material by N2 Group



N2grp collapsed into 4 groups (4+5+6) together

Lower score indicates increased agreement in publishing such material.

F=1.006, p<.394

Table 1:

T-tests of presidential trait expectations and privacy issues

Items (1=strongly agree; 5=strongly disagree)	**Mean scores (most important trait)** Job effectiveness only	(p-values)	Moral character
I believe an individual's personal life should NOT affect his or her professional life	2.21	(p<.001)	3.10
The office of the presidency is so sacred that all U.S. Presidents should be judged on both their professional and personal actions	3.34	(p<.001)	2.21
The lives of public officials should be open to public scrutiny through the media	3.40	(p<.001)	2.62
Journalists should pursue reports about the sexual liaisons of public officials	3.89	(p<.001)	3.27
There has been too much media attention Paid to the President's relationship with Monica Lewinsky	1.43	(p<.001)	2.08
It is appropriate to publish material of a sexual nature on the Internet if it is part of an official government document	3.16	(p>.05 – n.s.)	2.88
It is appropriate for newspapers and magazines to publish material of a sexual nature if it is part of an official government report	2.97	(p>.05 – n.s.)	2.83

Table 2:

Zero-order Correlations with Media Blame Groups

Demographic characteristics

Variable	Correlation (r)	p-value
Age	-.03	.74
Sex	.14	.13
College major	.01	.93
Political party	-.07	.46
Political knowledge	.22	.03*
Moral judgment (N2 Group)	.26	.01*

Attitudinal variables with significant relationships

Item	Correlation (r)	p-value
[PRIVACY ITEMS] I believe an individual's personal life should NOT affect his or her professional life	-.18	.04
The lives of public officials should be open to public scrutiny through the media	.28	.01
The office of the presidency is so sacred that all U.S. Presidents should be judged on both their professional and personal actions	.21	.02
Journalists should pursue reports about the sexual liaisons of public officials	.25	.01

Table 2 (continued):

Zero-order Correlations with Media Blame Groups

Attitudinal variables

Item	Correlation (r)	p-value
[KENNETH STARR ITEMS]		
I am ashamed of Kenneth Starr's actions	-.22	.02
Kenneth Starr did not think about what was best for the country when he investigated Clinton's sexual liaisons	-.22	.02
I believe that Kenneth Starr should be sanctioned for his actions	-.19	.04
[CLINTON ITEMS]		
I believe the President should be impeached for his actions	.33	.001
I support most of Clinton's policies	-.22	.02
Clinton has the character to do a good job as president for the remainder of his term	-.34	.001
Clinton has the competence to do a good job as president for the reminder of his term	-.32	.001

Appendix B
Copies of survey instrument

5-digit ID number 00107

There has been a lot of discussion about the Clinton-Lewinsky-Starr situation. We are interested in your opinions about it and have put together some questions for you. Please answer truthfully. There are no right or wrong answers.

1. I believe an individual's personal life should NOT affect his or her professional life.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

2. The lives of public officials should be open to public scrutiny through the media.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

3. I am proud to be an American.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree   Not Applicable

4. I am proud to be a member of my political party (Democrat, Republican, Independent, or Other).

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree   Not Applicable

5. The office of the presidency is so sacred that all U.S. Presidents should be judged on both their professional and personal actions.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

6. We have higher standards for presidential behavior than we had in the past.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

7. It is understandable to lie about an extramarital affair.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

8. Spouses should forgive each other for infidelity.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

9. President Clinton's affair with Monica Lewinsky has damaged the office of the presidency.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

10. The office of the presidency has been damaged by what Independent Counsel Kenneth Starr has done during his investigation.

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

11. I am ashamed of President Clinton's actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

12. I am ashamed of Kenneth Starr's actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

13. I am ashamed of the House of Representatives for making this a partisan issue.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Disagree

14. I have paid a lot of attention to the news coverage about President Clinton's affair with Monica Lewinsky.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

15. I have paid a lot of attention to Kenneth Starr's motives.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

16. I believe the President should be impeached for his actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

17. I believe the President should be sanctioned, but not impeached, for his actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

18. I believe that the attention to these issues should be dropped so that Washington can get back to the business of running the country.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

19. President Clinton's relationship with Monica Lewinsky should be of no concern to the American public because the relationship was between two consenting adults.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

20. President Clinton's relationship with Monica Lewinsky is a problem because of Ms. Lewinsky's position in the White House as an intern.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

21. President Clinton's relationship with Monica Lewinsky is a problem because of Ms. Lewinsky's comparatively young age.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

22. President Clinton's affair with Monica Lewinsky is a problem because their relationship took place in the White House.

Strongly Agree Agree Neutral Disagree Strongly Disagree

23. Monica Lewinsky should be condemned because she was the aggressor in the relationship.

Strongly Agree Agree Neutral Disagree Strongly Disagree

24. There has been too much media attention paid to the President's relationship with Monica Lewinsky.

Strongly Agree Agree Neutral Disagree Strongly Disagree

25. Massive media coverage of the President's affair will make it more difficult for the United States to act as a power in international affairs.

Strongly Agree Agree Neutral Disagree Strongly Disagree

26 The situation surrounding President Clinton's relationship with Monica Lewinsky is a problem because he lied to the American people.

Strongly Agree Agree Neutral Disagree Strongly Disagree

27. The situation surrounding President Clinton's relationship with Monica Lewinsky is a problem because he lied under oath.

Strongly Agree Agree Neutral Disagree Strongly Disagree

28. Kenneth Starr, the independent counsel, has gone too far with his investigation of President Clinton.

Strongly Agree Agree Neutral Disagree Strongly Disagree

29. The only reason Kenneth Starr's investigation and report are receiving so much press is because they focus on sex.

Strongly Agree Agree Neutral Disagree Strongly Disagree

30. Kenneth Starr did not think about what was best for the country when he investigated Clinton's sexual liaisons.

Strongly Agree Agree Neutral Disagree Strongly Disagree

31. Clinton should be treated like other presidents and be excused for these kinds of misdeeds.

Strongly Agree Agree Neutral Disagree Strongly Disagree

32. I believe that the House of Representatives should be ashamed of its actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

33. It is appropriate to publish material of a sexual nature on the Internet if it is part of an official government report.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

34. It is appropriate for newspapers and magazines to publish material of a sexual nature if it is part of an official government report.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

35. Journalists should pursue reports about the sexual liaisons of public officials.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

36. I believe that Kenneth Starr should be sanctioned for his actions.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

37. How harmful were these Presidents' behaviors to the nation?

a. President Clinton (Lewinsky and testimony)

Very	A lot	A little	Not much	Not at all	Don't know

b. President Reagan (Iran-Contra: selling arms to fund a war and release hostages without the necessary Congressional approval)

Very	A lot	A little	Not much	Not at all	Don't know

c. President Nixon (Watergate break-in and coverup)

Very	A lot	A little	Not much	Not at all	Don't know

d. President Kennedy (multiple sexual liaisons while in office)

Very	A lot	A little	Not much	Not at all	Don't know

e. President Harding (illegitimate child while in office)

Very	A lot	A little	Not much	Not at all	Don't know

38. How much blame should each of the following get for the Clinton-Lewinsky-Starr situation (add up to 100%)
___President Clinton
___Kenneth Starr
___Linda Tripp
___Monica Lewinsky
___House of Representatives
___the media
___the political system

39. I support most of Clinton's policies.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

40. Clinton has the character to do a good job as president for the remainder of his term.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

41. Clinton has the competence to do a good job as president for the remainder of his term.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

42. How would you describe yourself in terms of being informed about news events?

1	2	3	4	5
Well informed				Not informed

43. How often do you read/watch/listen to the news media?

1	2	3	4	5
Very frequently				Never

44. President Clinton has apologized. Do you think anyone else should apologize? If so, who?

45. What job or political office is now held by Al Gore?

46. Whose responsibility is it to determine if a law is constitutional or not:

the President   the Congress   the Supreme Court

47. How much of a majority is required for the U.S. Senate and House to override a presidential veto?

48. Which party has the most members in the House of Representatives?

49. Which party is most conservative at the national level?

50. Would you be satisfied if no action were taken against President Clinton? YES NO

51. Which is most important in rating how a President is doing his job? (Circle one.)

Moral Values Position on issues Ability to manage the Government

52. Which is more important? (Pick one.)

___That a President be a moral role model
___That a President do his job effectively
___Both

53. Are you currently a registered voter? YES NO

54. Did you vote in the November elections? YES NO

55. With which political party do you most often identify?
1. Democrat
2. Independent but leaning towards Democrat
3. Independent
4. Independent but leaning towards Republican
5. Republican
6. Other:________________________________

DIT-2

Defining Issues Test

Version 3.0

University of Minnesota
Center for Research in Ethical Development

Copyright, James Rest & Darcia Narvaez
All Rights Reserved, 1998

Instructions

This questionnaire is concerned with how you define the issues in a social problem. Several stories about social problems will be described. After each story, there will be a list of questions. The questions that follow each story represent different issues that might be raised by the problem. In other words, the questions/issues raise different ways of judging what is important in making a decision about the social problem. You will be asked to rate and rank the questions in terms of how important each one seems to you.

This questionnaire is in two parts: one part contains the **INSTRUCTIONS** (this part) and the stories presenting the social problems; the other part contains the questions (issues) and the **ANSWER SHEET** on which to write your responses.

Here is an example of the task:

Presidential Election

Imagine that you are about to vote for a candidate for the Presidency of the United States. Imagine that before you vote, you are given several questions, and asked which issue is the most important to you in making up your mind about which candidate to vote for. In this example, 5 items are given. On a rating scale of 1 to 5 (1=Great, 2=Much, 3=Some, 4=Little, 5=No) please rate the importance of the item (issue) by filling in with a pencil one of the bubbles on the answer sheet by each item.

BEST COPY AVAILABLE

Assume that you thought that item #1 (below) was of great importance, item #2 had some importance, item #3 had no importance, item #4 had much importance, and item #5 had much importance. Then you would fill in the bubbles on the answer sheet as shown below.

1 Great	2 Much	3 Some	4 Little	5 No	Item #:
●	○	○	○	○	1. Financially are you personally better off now than you were four years ago?
○	○	●	○	○	2. Does one candidate have a superior personal moral character?
○	○	○	○	●	3. Which candidate stands the tallest?
○	●	○	○	○	4. Which candidate would make the best world leader?
○	●	○	○	○	5. Which candidate has the best ideas for our country's internal problems, like crime and health care?

Further, the questionnaire will ask you to rank the questions in terms of importance. In the space below, the numbers at the top, 1 through 12, represent the item number. From top to bottom, you are asked to fill in the bubble that represents the item in first importance (of those given you to chose from), then second most important, third most important, and fourth most important. Please indicate your top four choices. You might fill out this part, as follows:

Item number:	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Most important item	●	○	○	○	○	○	○	○	○	○	○	○
Second most important	○	○	○	○	●	○	○	○	○	○	○	○
Third most important	○	○	○	●	○	○	○	○	○	○	○	○
Fourth most important	○	●	○	○	○	○	○	○	○	○	○	○

Note that some of the items may seem irrelevant to you (as in item #3) or not make sense to you--in that case, **rate** the item as "No" importance and do not **rank** the item. Note that in the stories that follow, there will be 12 items for each story, not five. Please make sure to consider all 12 items (questions) that are printed after each story.

In addition you will be asked to state your preference for what action to take in the story. After the story, you will be asked to indicate the action you favor on a seven-point scale (1=strongly favor some action, 7=strongly oppose that action).

In short, read the story from this booklet, then fill out your answers on the answer sheet. Please use a #2 pencil. If you change your mind about a response, erase the pencil mark cleanly and enter your new response.

[Notice the second part of this questionnaire, the Answer Sheet. The Identification Number at the top of the answer sheet may already be filled in when you receive your materials. If not, you will receive instructions about how to fill in the number. If you have questions about the procedure, please ask now.

Please turn now to the Answer Sheet.]

BEST COPY AVAILABLE

Famine --(Story #1)

The small village in northern India has experienced shortages of food before, but this year's famine is worse than ever. Some families are even trying to feed themselves by making soup from tree bark. Mustaq Singh's family is near starvation. He has heard that a rich man in his village has supplies of food stored away and is hoarding food while its price goes higher so that he can sell the food later at a huge profit. Mustaq is desperate and thinks about stealing some food from the rich man's warehouse. The small amount of food that he needs for his family probably wouldn't even be missed.

[If at any time you would like to reread a story or the instructions, feel free to do so. Now turn to the Answer Sheet, go to the 12 issues and rate and rank them in terms of how important each issue seems to you.]

Reporter --(Story #2)

Molly Dayton has been a news reporter for the *Gazette* newspaper for over a decade. Almost by accident, she learned that one of the candidates for Lieutenant Governor for her state, Grover Thompson, had been arrested for shop-lifting 20 years earlier. Reporter Dayton found out that early in his life, Candidate Thompson had undergone a confused period and done things he later regretted, actions which would be very out-of-character now. His shop-lifting had been a minor offense and charges had been dropped by the department store. Thompson has not only straightened himself out since then, but built a distinguished record in helping many people and in leading constructive community projects. Now, Reporter Dayton regards Thompson as the best candidate in the field and likely to go on to important leadership positions in the state. Reporter Dayton wonders whether or not she should write the story about Thompson's earlier troubles because in the upcoming close and heated election, she fears that such a news story could wreck Thompson's chance to win.

[Now turn to the Answer Sheet, go to the 12 issues for this story, rate and rank them in terms of how important each issue seems to you.]

BEST COPY AVAILABLE

School Board --(Story #3)

Mr. Grant has been elected to the School Board District 190 and was chosen to be Chairman. The district is bitterly divided over the closing of one of the high schools. One of the high schools has to be closed for financial reasons, but there is no agreement over which school to close. During his election to the School Board, Mr. Grant had proposed a series of "Open Meetings" in which members of the community could voice their opinions. He hoped that dialogue would make the community realize the necessity of closing one high school. Also he hoped that through open discussion, the difficulty of the decision would be appreciated, and that the community would ultimately support the school board decision. The first Open Meeting was a disaster. Passionate speeches dominated the microphones and threatened violence. The meeting barely closed without fist-fights. Later in the week, school board members received threatening phone calls. Mr. Grant wonders if he ought to call off the next Open Meeting.

[Now turn to the Answer Sheet, go to the 12 issues for this story, rate and rank them in terms of how important each issue seems to you.]

Cancer --(Story #4)

Mrs. Bennett is 62 years old, and in the last phases of colon cancer. She is in terrible pain and asks the doctor to give her more pain-killer medicine. The doctor has given her the maximum safe dose already and is reluctant to increase the dosage because it would probably hasten her death. In a clear and rational mental state, Mrs. Bennett says that she realizes this, but she wants to end her suffering even if it means ending her life. Should the doctor give her an increased dosage?

[Now turn to the Answer Sheet, go to the 12 issues for this story, rate and rank them in terms of how important each issue seems to you.]

Demonstration --(Story #5)

Political and economic instability in a South American country prompted the President of the United States to send troops to "police" the area. Students at many campuses in the U.S.A. have protested that the United States is using its military might for economic advantage. There is widespread suspicion that big oil multinational companies are pressuring the President to safeguard a cheap oil supply even if it means loss of life. Students at one campus took to the streets in demonstrations, tying up traffic and stopping regular business in the town. The president of the university demanded that the students stop their illegal demonstrations. Students then took over the college's administration building, completely paralyzing the college. Are the students right to demonstrate in these ways?

[Now turn to the Answer Sheet, go to the 12 issues for this story, rate and rank them in terms of how important each issue seems to you.]

BEST COPY AVAILABLE

DIT-2 Answer Sheet

University of Minnesota
Copyright, James Rest and Darcia Narvaez
All Rights Reserved, 1998

IDENTIFICATION NUMBER

⓪ ① ② ③ ④ ⑤ ⑥ ● ⑧ ⑨
● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
⓪ ● ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Please read story #1 in the INSTRUCTIONS booklet.

Famine -- (Story #1)

What should Mustaq Singh do? Do you favor the action of taking the food? (Mark one.)

Take Food ① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

① ② ③ ④ ⑤ 1. Is Mustaq Singh courageous enough to risk getting caught for stealing?
① ② ③ ④ ⑤ 2. Isn't it only natural for a loving father to care so much for his family that he would steal?
① ② ③ ④ ⑤ 3. Shouldn't the community's laws be upheld?
① ② ③ ④ ⑤ 4. Does Mustaq Singh know a good recipe for preparing soup from tree bark?
① ② ③ ④ ⑤ 5. Does the rich man have any legal right to store food when other people are starving?
① ② ③ ④ ⑤ 6. Is the motive of Mustaq Singh to steal for himself or to steal for his family?
① ② ③ ④ ⑤ 7. What values are going to be the basis for social cooperation?
① ② ③ ④ ⑤ 8. Is the epitome of eating reconcilable with the culpability of stealing?
① ② ③ ④ ⑤ 9. Does the rich man deserve to be robbed for being so greedy?
① ② ③ ④ ⑤ 10. Isn't private property an institution to enable the rich to exploit the poor?
① ② ③ ④ ⑤ 11. Would stealing bring about more total good for everybody concerned or wouldn't it?
① ② ③ ④ ⑤ 12. Are laws getting in the way of the most basic claim of any member of a society?

Rank which issue is the most important (item number).

Most important item ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Third most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Fourth most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Now please return to the Instructions booklet for the next story.

Reporter -- (Story #2)

Do you favor the action of reporting the story? (Mark one.)

Report the story ① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

① ② ③ ④ ⑤ 1. Doesn't the public have a right to know all the facts about all the candidates for office?
① ② ③ ④ ⑤ 2. Would publishing the story help Reporter Dayton's reputation for investigative reporting?
① ② ③ ④ ⑤ 3. If Dayton doesn't publish the story wouldn't another reporter get the story anyway and get the credit for investigative reporting?
① ② ③ ④ ⑤ 4. Since voting is such a joke anyway, does it make any difference what reporter Dayton does?
① ② ③ ④ ⑤ 5. Hasn't Thompson shown in the past 20 years that he is a better person than his earlier days as a shop-lifter?
① ② ③ ④ ⑤ 6. What would best serve society?
① ② ③ ④ ⑤ 7. If the story is true, how can it be wrong to report it?
① ② ③ ④ ⑤ 8. How could reporter Dayton be so cruel and heartless as to report the damaging story about candidate Thompson?
① ② ③ ④ ⑤ 9. Does the right of "habeas corpus" apply in this case?
① ② ③ ④ ⑤ 10. Would the election process be more fair with or without reporting the story?
① ② ③ ④ ⑤ 11. Should reporter Dayton treat all candidates for office in the same way by reporting everything she learns about them, good and bad?
① ② ③ ④ ⑤ 12. Isn't it a reporter's duty to report all the news regardless of the circumstances?

Rank which issue is the most important (item number).

Most important item ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Third most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Fourth most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Now please return to the Instructions booklet for the next story.

PLEASE DO NOT WRITE IN THIS AREA

■○○■■■○○■■■○○○○○○○○○○○○○ 01849

School Board -- (Story #3)

Do you favor calling off the next Open Meeting?

Call off meeting ① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

① ② ③ ④ ⑤ 1. Is Mr. Grant required by law to have Open Meetings on major school board decisions?
① ② ③ ④ ⑤ 2. Would Mr. Grant be breaking his election campaign promises to the community by discontinuing the Open Meetings?
① ② ③ ④ ⑤ 3. Would the community be even angrier with Mr. Grant if he stopped the Open Meetings?
① ② ③ ④ ⑤ 4. Would the change in plans prevent scientific assessment?
① ② ③ ④ ⑤ 5. If the school board is threatened, does the chairman have the legal authority to protect the Board by making decisions in closed meetings?
① ② ③ ④ ⑤ 6. Would the community regard Mr. Grant as a coward if he stopped the open meetings?
① ② ③ ④ ⑤ 7. Does Mr. Grant have another procedure in mind for ensuring that divergent views are heard?
① ② ③ ④ ⑤ 8. Does Mr. Grant have the authority to expel troublemakers from the meetings or prevent them from making long speeches?
① ② ③ ④ ⑤ 9. Are some people deliberately undermining the school board process by playing some sort of power game?
① ② ③ ④ ⑤ 10. What effect would stopping the discussion have on the community's ability to handle controversial issues in the future?
① ② ③ ④ ⑤ 11. Is the trouble coming from only a few hotheads, and is the community in general really fair-minded and democratic?
① ② ③ ④ ⑤ 12. What is the likelihood that a good decision could be made without open discussion from the community?

Rank which issue is the most important (item number).

Most important item	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	Third most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	Fourth most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Now please return to the Instructions booklet for the next story.

Cancer -- (Story #4)

Do you favor the action of giving more medicine?

Give more medicine ① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

① ② ③ ④ ⑤ 1. Isn't the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her?
① ② ③ ④ ⑤ 2. Wouldn't society be better off without so many laws about what doctors can and cannot do?
① ② ③ ④ ⑤ 3. If Mrs. Bennett dies, would the doctor be legally responsible for malpractice?
① ② ③ ④ ⑤ 4. Does the family of Mrs. Bennett agree that she should get more painkiller medicine?
① ② ③ ④ ⑤ 5. Is the painkiller medicine an active heliotropic drug?
① ② ③ ④ ⑤ 6. Does the state have the right to force continued existence on those who don't want to live?
① ② ③ ④ ⑤ 7. Is helping to end another's life ever a responsible act of cooperation?
① ② ③ ④ ⑤ 8. Would the doctor show more sympathy for Mrs. Bennett by giving the medicine or not?
① ② ③ ④ ⑤ 9. Wouldn't the doctor feel guilty from giving Mrs. Bennett so much drug that she died?
① ② ③ ④ ⑤ 10. Should only God decide when a person's life should end?
① ② ③ ④ ⑤ 11. Shouldn't society protect everyone against being killed?
① ② ③ ④ ⑤ 12. Where should society draw the line between protecting life and allowing someone to die if the person wants to?

Rank which issue is the most important (item number).

Most important item	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	Third most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫
Second most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫	Fourth most important	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Now please return to the Instructions booklet for the next story.

PLEASE DO NOT WRITE IN THIS AREA

BEST COPY AVAILABLE

Demonstration -- (Story #5)

Do you favor the action of demonstrating in this way?

Students demonstrate ① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

Rate the following 12 issues in terms of importance (1-5)

GREAT	MUCH	SOME	LITTLE	NO	
①	②	③	④	⑤	1. Do the students have any right to take over property that doesn't belong to them?
①	②	③	④	⑤	2. Do the students realize that they might be arrested and fined, and even expelled from school?
①	②	③	④	⑤	3. Are the students serious about their cause or are they doing it just for fun?
①	②	③	④	⑤	4. If the university president is soft on students this time, will it lead to more disorder?
①	②	③	④	⑤	5. Will the public blame all students for the actions of a few student demonstrators?
①	②	③	④	⑤	6. Are the authorities to blame by giving in to the greed of the multinational oil companies?
①	②	③	④	⑤	7. Why should a few people like Presidents and business leaders have more power than ordinary people?
①	②	③	④	⑤	8. Does this student demonstration bring about more or less good in the long run to all people?
①	②	③	④	⑤	9. Can the students justify their civil disobedience?
①	②	③	④	⑤	10. Shouldn't the authorities be respected by students?
①	②	③	④	⑤	11. Is taking over a building consistent with principles of justice?
①	②	③	④	⑤	12. Isn't it everyone's duty to obey the law, whether one likes it or not?

Rank which issue is the most important (item number).

Most important item ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Second most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Third most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Fourth most important ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

Please provide the following information about yourself:

1. Age in years:

⓪	⓪
①	①
②	②
③	③
④	④
⑤	⑤
⑥	⑥
⑦	⑦
⑧	⑧
⑨	⑨

2. Sex (mark one): ○ Male ○ Female

3. Level of Education (mark highest level of formal education attained, if you are currently working at that level [e.g., Freshman in college] or if you have completed that level [e.g., if you finished your Freshman year but have gone on no further].)

○ Grade 1 to 6
○ Grade 7, 8, 9
○ Grade 10, 11, 12
○ Vocational/technical school (without a bachelor's degree) (e.g., Auto mechanic, beauty school, real estate, secretary, 2-year nursing program).
○ Junior college (e.g., 2-year college, community college, Associate Arts degree)
○ Freshman in college in bachelor degree program.
○ Sophomore in college in bachelor degree program.
○ Junior in college in bachelor degree program.
○ Senior in college in bachelor degree program.
○ Professional degree (Practitioner degree beyond bachelor's degree) (e.g., M.D., M.B.A., Bachelor of Divinity, D.D.S. in Dentistry, J.D. in law, Masters of Arts in teaching, Masters of Education [in teaching], Doctor of Psychology, Nursing degree along with 4-year Bachelor's degree)
○ Masters degree (in academic graduate school)
○ Doctoral degree (in academic graduate school, e.g., Ph.D. or Ed.D.)
○ Other Formal Education. (Please describe: ______________________________)

4. In terms of your political views, how would you characterize yourself (mark one)?

○ Very Liberal
○ Somewhat Liberal
○ Neither Liberal nor Conservative
○ Somewhat Conservative
○ Very Conservative

5. Are you a citizen of the U.S.A.?

○ Yes ○ No

6. Is English your primary language?

○ Yes ○ No

Thank You.

PLEASE DO NOT WRITE IN THIS AREA

Dilemma #6

Do you favor the action?

① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

①②③④⑤ 1.
①②③④⑤ 2.
①②③④⑤ 3.
①②③④⑤ 4.
①②③④⑤ 5.
①②③④⑤ 6.
①②③④⑤ 7.
①②③④⑤ 8.
①②③④⑤ 9.
①②③④⑤ 10.
①②③④⑤ 11.
①②③④⑤ 12.

Rank which issue is the most important (item number).

Most important item ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Second most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Third most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Fourth most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫

Dilemma #7

Do you favor the action?

① Strongly Favor ② Favor ③ Slightly Favor ④ Neutral ⑤ Slightly Disfavor ⑥ Disfavor ⑦ Strongly Disfavor

GREAT MUCH SOME LITTLE NO

Rate the following 12 issues in terms of importance (1-5)

①②③④⑤ 1.
①②③④⑤ 2.
①②③④⑤ 3.
①②③④⑤ 4.
①②③④⑤ 5.
①②③④⑤ 6.
①②③④⑤ 7.
①②③④⑤ 8.
①②③④⑤ 9.
①②③④⑤ 10.
①②③④⑤ 11.
①②③④⑤ 12.

Rank which issue is the most important (item number).

Most important item ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Second most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Third most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫
Fourth most important ①②③④⑤⑥⑦⑧⑨⑩⑪⑫

PLEASE DO NOT WRITE IN THIS AREA

■○○■■■○○■■■○○○○○○○○○○○○○ 01849

Media Ethics
I H

A Research Agenda for Establishing a Grounding for Journalistic Ethics

by

Dan Shaver
The University of North Carolina - Chapel Hill

Abstract

A Research Agenda for Establishing a Grounding for Journalistic Ethics

The author suggests a model derived from modified professional theory and a set of characteristics for a system of media ethics that may avoid some of the difficulties of traditional approaches. The model proposes the cultivation of a relationship of trust based on bargains between individual news organizations and the immediate public they serve. A six-phase research agenda for testing the basic assumptions and for developing and implementing the model is proposed.

Finally, a model based on balancing society's interests and media power through the cultivation of trust is proposed for further exploration. This model is based on a fundamental assumption regarding the nature of professional ethics. While traditional philosophical ethical theory attempts to identify and reason from universal principles of right and wrong to the determination of right action at the individual level, professional ethics represents a set of rules and values that are designed to guide and protect the profession within the society it serves. As such, it reflects and is shaped by the dominant ethical, cultural, and economic values of that society rather than a single set of moral principles. The analysis focuses primarily on the ethics of journalism -- the gathering and publication of news. Although there may be generalizability of the underlying assumptions to areas such as advertising, entertainment and public relations, simplicity of analysis demands a narrow focus.

A Brief History of Media Ethics

Past approaches to media ethics in America can be divided into three major categories: normative/professional, communications/philosophical and classical philosophical. The normative/professional approach is characterized by a close identification between ethical standards and accepted professional norms, an emphasis on objectivity and codes of ethics. The communications/philosophical approach involves a theoretical/ philosophical approach focused primarily on the social role of media/communications activities. This stream began with Milton and comes to the present through thinkers like Christians and Habermas. The classical philosophical approach, which is often recommended as a decision-making aid in conjunction with normative/professional guidelines, relies on principles from moral philosophers whose primary focus is social rather than media ethics. Such philosophers range from Aristotle to Kant to Rawls.

The Normative/Professional Stream

The normative/professional approach appeared first and has been the most persistent approach. As the American press evolved during the 19th Century, expectations and standards regarding content changed. Schudson notes that prior to the 1830s, newspapers were expected to be partisan and objectivity, and media ethics as we understand the subject today, were not concerns.[2] By the middle of the century, however, the creation of paid reporting staffs, the growth of mass markets and the development of national news gathering organizations gave rise to a style of news coverage that mixed an emphasis on facts with colorful story-telling. Journalists from the mid-19th Century until after World War I, Schudson says, were "naive empiricists" who believed their job was to report the world factually and entertainingly, oblivious to the impact the observer's values might have on the recounting of events observed. Schudson says this began changing by the 1920s and '30s as journalists started questioning the adequacy of simple facts and the public began warily eyeing the impact of the press on society.

This period of professional self-doubt corresponds with what Christians describes a burst of media ethics publications in the 1920s and early 1930s.[3] He identifies several common themes running through the most prominent works of this period:

---

[2] Michael Schudson, *Discovering the News* (New York: Basic Books, Inc., 1978), 6.

[3] Clifford G. Christians, "Fifty Years of Scholarship in Media Ethics," *Journal of Communication* 29, no. 4 (Fall 1977): 19.

- A commitment to establishing journalism on equal professional status with law and medicine.
- Identification of university-based schools of journalism as the key to this transformation.
- The embracing of ethical standards stressing relationships and the journalist's duties to a professional community as well as to those served.

Pressing these themes encouraged the development of formal ethics codes around the country.[4] After the adoption of the first known U.S. journalism ethics code by the Kansas Editorial Association in 1910, Christians notes, virtually all professional societies and most publishers had developed and adopted codes by the early 1930s.

Christians observes that interest in media ethics diminished in the 1930s, and academic attention to the field evaporated for nearly four decades. In place of inquiry into how one ought to perform journalism, the notion of objectivity -- that journalists have a responsibility to report as accurately, thoroughly and neutrally as possible the events of the day -- seized the profession. Christians attributes the rise of objectivity to several factors, especially the desire of mass market newspaper publishers to avoid offending significant segments of their potential market and the growing view throughout society that science and positivism were the model for making the world a better place.[5] May goes further, making a strong case for the argument that the ethic of objectivity essentially became the ethic of the media, accounting for the long inattention to the topic.[6] Schudson agrees that the ethic of objectivity contained a significant moral component that accounted for part of its appeal to journalists.[7]

---

[4] Ethics texts of the period include: N. A. Crawford, *The Ethics of Journalism* (New York: Alfred A. Knopf, 1924); L. N. Flint, *The Conscience of the Newspaper* (New York: D. Appleton, 1925); W. F. Gibbons, *Newspaper Ethics: A Discussion of Good Practice for Journalists* (Ann Arbor, Mich.: Edwards Bros., 1926); A. F. Henning, *Ethics and Practices in Journalism* (New York: Long and Smith, 1932).

[5] Christians, "Fifty Years of Scholarship in Media Ethics," 21.

By the 1980s, the notion of objectivity became controversial and research called into question the effectiveness of ethics codes in guiding journalists' decision-making. Ethicists such as Black and Barney argued codes should be relegated to plaques on the wall.[8] While codes provide minimal guidance for the neophyte journalist and give the public a perception that media professionals are concerned about ethical issues, they asserted, the findings of psychology about how people make moral choices, a lack of enforcement mechanisms, and ambiguity in wording render codes of little real value to the profession. Effective enforcement procedures, they argued, are impossible because of First Amendment constraints.

- Others, such as Christians, argued codes do have effectiveness based on accountability to one's professional peers and enforcement through peer censure.[9] He called for making codes more effective by cultivating a greater willingness among journalists to reveal and criticize code violations. Some, such as Johannesen, argued that media codes have value apart from issues of enforcement.[10] Drawing on the works of Bok, Garrett, Kintneer and Green, DeGeorge, and Meyer, Johannesen identified several positive values to codes that stand independent of enforcement issues.[11]

---

[6] William F. May, "Professional Ethics, The University, and The Journalist," *Journal of Mass Media Ethics* 1, no. 2 (Spring/Summer 1986), 20-31.

[7] Schudson, Discovering The News: A Social History of American Newspapers, 228.

[8] Jay Black and Ralph D. Barney, "The Case Against Mass Media Codes of Ethics," *Journal of Mass Media Ethics* 1, no. 1 (Fall/Winter 1985-86), 28.

[9] Clifford Christians, "Enforcing Media Codes," *Journal of Mass Media Ethics* 1, no. 1 (Fall/Winter 1985-86), 14-21.

[10] Richard L. Johannesen, "What Should We Teach About Formal Codes of Communication Ethics?" *Journal of Mass Media Ethics* 3, no. 1: 59-64.

[11] Sissela Bok, *Lying: Moral Choice in Public Life* (New York: Vintage, 1979); Thomas M. Garrett, *Ethics in Business* (New York: Sheed and Ward, 1963); Earl W. Kintneer, and Robert W. Green, "Opportunities for Self-Enforcement Codes of Conduct." In *Ethics, Free Enterprise and Public Policy* eds. Richard T. DeGeorge and Joseph A. Pichler (New York: Oxford University Press, 1978); Richard T. DeGeorge,

Although the notion of objectivity has become controversial and the effectiveness of codes in guiding journalists' decision-making is questionable, one need only turn to newsroom handbooks, the SPJ web site or to any college media ethics text for evidence of the longevity of this approach.

The Communications Philosophical Stream

The roots of this approach can be traced to Milton's notion of the role of free communications in the marketplace of ideas and its later refinement in the libertarian views of Jefferson and others concerned with defining the role of a free press within a system of democratic institutions.

This approach took on new energy shortly after World War II as press critics began to argue that journalists had a responsibility to go beyond the facts and accept responsibility for improving society. The 1947 report by the Commission on Freedom of the Press (the Hutchins Commission) asserted the existence of social obligations by the press and called for the establishment of instruments to monitor and ensure socially responsible performance. The report enumerated specific social obligations the Commission felt the media owed.

The social responsibility argument received a boost a few years later with the publication of *Four Theories of the Press.*[12] In *Four Theories*, Peterson, who authored the chapter on social responsibility theory, traces its origins to the Hutchins Commission and identifies six key press functions: servicing the political system by providing

---

Business Ethics (2nd ed.) (New York: Macmillan. 1986); Philip Meyer, *Ethical Journalism* (New York: Longman,1987).

[12] Fred S. Siebert, Theodore Peterson, and Wilbur Schramm, *Four Theories of the Press* (Urbana/ Chicago/London: University of Illinois Press, 1956), 74.

information for political debate, enlightening the public by providing information necessary for self-government, safeguarding individual rights against government, serving the economy through dissemination of advertising information, providing entertainment, and maintaining economic self-sufficiency. Other writers followed. Gilmore and Root and Kohler argued that mere facts and neutrality were inadequate to serve society's needs and that journalists should focus on relevance, thoroughness and the need for social reform. [13] Rivers and Schramm analyzed the role of mass media, found it wanting, and proposed that government, the public and the press must all share the responsibility of ensuring that mass media function in a manner that is supportive of social needs.[14] Gerald looked at the mass media as a social institution and attempted to evaluate its efforts to effectively serve social ends.[15]

Beginning in the 1980s, this line of discourse widened in several dimensions as writers began to explore ethical issues related to communications in ways that were independent of the constraints of the professional journalist. Researchers began exploring applications of rhetoric and speech communication theory to interpersonal, organizational and public communications [16] and analyzing communication decision-making within corporate and organizational environments.[17] The literature showed an increasing reliance on the perspectives provided by political science, philosophical ethics, psychology, and sociology in exploring the nature and role of mass media in contemporary society. The search for a grounding for media ethics became more theoretical and philosophical.

---

[13] Gene Gilmore and Robert Root, *Modern Newspaper Editing* (San Francisco: The Glendessary Press, Inc. 1971); W. Kohler, *The Place of Value in a World of Facts* (New York: Mentor Books, 1966).

[14] William L. Rivers and Wilbur Schramm, *Responsibility in Mass Communication* (revised edition) (New York: Harper and Row, 1969).

[15] J. Edward Gerald, *The Social Responsibility of the Press* (Minneapolis: University of Minnesota Press, 1963).

[16] R. L. Johannesen, *Ethics in Human Communication*, 3rd. ed. (Prospect Heights, IL: Waveland Press, 1990).

[17] J. A. Jaksa and M.S. Pritchard. *Communication Ethics: Methods of Analysis*, 2nd ed. (Belmont, CA: Wadsworth, 1994).

With the 1990 translation of *Moralbewusstsein und kommunikatives Handeln*[18] and the publication of *The Communicative Ethics Controversy,*[19] Habermas's theory of discourse ethics assumed a prominent role in the media ethics debate. Recognizing the fundamental role of language in structuring cultural and social organizations, Habermas offers a model of ethical discourse based on "reasoned agreement among those subject to the norms in question."[20] He rejects Kant's formal system of moral imperatives and replaces it with a communication community of common interests where competing normative ethical claims are resolved in the public sphere through ideal speech. Habermas also rejects the liberal democratic ideals that have been integral to most communication ethics theories, arguing instead that "moral consciousness must be nurtured . . . under conditions of instrumental technocracy and institutional power that stifle autonomous action in the public arena."[21]

A little later, Christians, Ferre and Fackler proposed a philosophical approach to media ethics based on communitarian values.[22] In the communitarian model, the purpose of journalism is to provide a clear and comprehensive account of events that furthers the functioning of a just society using communitarian values.

---

[18] J. Habermas, *Moral Consciousness and Communicative Action*, trans. C. Lenhardt and S. W. Nicholsen (Cambridge, MA and London: MIT Press, 1990).

[19] S. Benhabib and F. Dallmayr, eds. *The Communicative Ethics Controversy* (Cambridge, MA and London: MIT Press, 1990).

[20] Habermas, *Moral Consciousness and Communicative Action*, viii.

[21] Christians, "Review Essay: Current Trends in Media Ethics," 552.

[22] C. G. Christians, J. P. Ferre and M. Fackler, *Good News: Social Ethics and the Press* (New York: Oxford University Press, 1993).

Despite these initiatives, the level of progress in developing a coherent philosophical approach to media ethics has been disappointing. In a 1995 article, Christians asserts that one measure of the quality of work being done in a field is the impact it has on its parent field -- in this case, media ethics on professional ethics.[23] Key issues for those working on professional ethics include accountability, the nature of institutions as moral agents, the validity of normative ethics absent appeal to transcendental authority, and the development of mechanisms for preventing professional standards from degenerating to arbitrary and self-serving levels. Unfortunately, Christians concludes, recent works in communication and media ethics have had little impact on these issues.

The Classical Philosophical Stream

In the 1980s, Black and Barney, dissatisfied with the effectiveness of ethics codes, urged the development of ethical standards based on solid philosophical principles that all could readily embrace. Christians and others agreed, arguing that Western philosophy has produced a body of literature dealing systematically with the grounds for moral decisions. Some of these methodologies have received wide acceptance in society and can be used as appropriate benchmarks by decision-makers in the media.[24]

---

[23] Clifford G. Christians, "Review Essay: Current Trends in Media Ethics," *European Journal of Communication* 10, no. 4 (Fall 1995): 550.

[24] Clifford G. Christians, Mark Fackler and Kim B. Rotzoll. *Media Ethics: Cases & Moral Reasoning*, 4th ed. (White Plains, NY: Longman, 1995): 350.

The most commonly applied rules, singularly or in combination, included:

- Aristotle's Golden Mean: "Moral virtue is the appropriate location between two extremes."
- Kant's Categorical Imperative: "Act on that maxim which you will to become a universal law."
- Mill's Principle of Utility: "Seek the greatest happiness for the greatest number."
- Rawl's Veil of Ignorance: "Justice emerges when negotiating without social differentiation."
- Judeo-Christian *agape:* "Love your neighbor as yourself."
- William David Ross' Pluralistic Theory of Value: "Equal and competing values that gain moral weight from the nature of the individual's duties."

As a result, classical philosophers have become a staple of media ethics textbooks and students of the subject are regularly asked to consider what Kant or Mill would say to do in a given situation.

Deficiencies of Traditional Approaches

The normative/professional approach has several limitations. As noted above, researchers have raised serious questions about the effectiveness of ethics codes in affecting practitioners' ethical decisions. Another, and perhaps more serious flaw, is that they lack both authority and accountability. Most writers about the concept of obligation have argued that obligation requires an authoritative rule-giver with the ability to provide rewards and sanctions for compliance and non-compliance, that it arises from a bargain freely entered between two or more entities, or that it springs from some inner sense of duty to self-evident and internalized principles. Ethics codes for the traditional professions -- with licensing provisions and review boards -- fit the former model; media ethics codes do not. There appears to be no basis for arguing that codes represent a bargain; there are no identifiable parties or exchange of benefits. Some might argue for a First Amendment-based bargain but constitutional rights to freedom of expression appear to be no different for the press than for any other citizen and nothing in the constitution specifies how those rights must be exercised. Nor is there compelling evidence that journalists accept and internalize the values on which ethics codes are based. In fact, the research tends to imply that informal organizational culture and personal value systems developed apart from the professional role are more powerful determinants of decision-making. Finally, the normative/professional approach lacks a theoretical grounding. Codes may reflect a professional consensus regarding appropriate working behavior but they generally lack justification for why some behaviors are appropriate and others are not. At root, their authority tends to be "because that's the way we've agreed to do it." That is hardly an intellectually satisfying reason for the practitioner who may disagree or question the rules. Codes also tend to be too narrow, focusing only on the newsgathering function or a small slice of the media organization's behavior. Just as the values and behavior of one member of a family impact the decisions by and public perceptions of other members of the family, organizations require congruent standards of behavior to be most effective.

The communications philosophical stream suffers from two serious flaws. The first is a tendency to require unrealistic and unattainable changes in economic or social institutions to be workable. For example, in *Good News: Social Ethics and the Press*, Christians calls for an abandonment of the American culture of individualism and the divorcing of media from capitalism. However compelling the arguments for such change, it is, realistically, unlikely to occur. The second major flaw of this stream is a lack of connection to practitioners. How likely are reporters to read Habermas? How useful are "public spheres" to a city editor on deadline trying to decide how to handle a story about allegations of rape by a patient in a drug treatment program against the owner of the local NBA team?

The major flaw in the classical philosophical approach is inherent in its diversity. Although a study of classical philosophy can be invaluable in helping a student of ethics understand the nature of ethical reasoning and the issues of ethical decision-making, offering up an unrelated assortment of simplified philosophical principles as a basis for making decisions amounts to little more than multiple-choice rationalization. What possible reason, aside from a pre-determined personal preference, can be cited for choosing between Mill -- the ultimate consequentialist -- and Kant --the ultimate non-consequentialist? What intellectual consistency can be argued for choosing Aristotle today and Rawl tomorrow?

Characteristics of an Effective Approach to Media Ethics

Drawing on the above analysis, the following are proposed as essential characteristics of a systematic approach to media ethics which could provide functionality for practitioners decision-making and a common ground for discussion within both the professional and public domains:

1. *The approach must be practical*. "Practical" in this context means having some realistic expectation of achievement or implementation. Plato pioneered the art of the logically desirable but impossible order with his *Republic*. Theoretical approaches to media ethics that require a drastic reorientation of social or economic values may be intellectually attractive but have little hope of achieving acceptance.

   "Practical" also has a second meaning in this context. A workable approach must embrace issues such as economics, audience and technology that have specific impact on news decision-making. For example, too often those who are concerned about media ethics treat the realities of economics like "the Crazy Aunt Harriet we keep locked in the closet and don't want to talk about." Everybody knows she's there and won't go away, but we'd prefer not to acknowledge her impact on our lives. Economic issues are integral to media functioning. Simplistic rationales that argue "news" is too important to be bothered by economic issues deny the reality that must be addressed in forging any approach to media behavior that can hope to achieve broad functionality. Similarly, shifting patterns of usage among media audiences, changing expectations regarding the amount and timeliness of information availability and the impact of new technologies on both delivery channels and content creation cannot be ignored. This implies specific attention to developing mechanisms and protocols for balancing and evaluating conflicting values in different contexts.

2. *The approach must be clear and understandable.* An ethical approach that hopes to result in real-world functionality must be one that is easily understood by working media professionals and by the general public. Esoteric theoretical approaches to communications ethics may be intellectually satisfying to scholars, but they won't make a difference in newsrooms or the general public discourse. They won't be understood and they won't be adopted. Understandable, however, does not mean simplistic. *The Bible* and *The Koran* are two examples of documents setting forth reasonably sophisticated but comprehensible moral codes that have served significant portions of humanity with reasonable satisfaction for long periods of time. On the other hand, Kant's *Critique of Practical Reason* possesses greater intellectual sophistication and has arguably exerted a greater impact on the currents of 20th

Century ethical thought, but it is virtually impossible to find anyone who claims to live by the principles of Kant's theories.

Comprehensibility is also important for application. If practitioners are to make solid ethical judgments rather than rote selections, they must understand the principles of the framework within which the judgments are to be made. Similarly, if the public is to evaluate media performance and hold it accountable, the standards claimed and used by media practitioners must be accessible and understandable to the general public.

3. _The approach must be capable of modifying its prescriptive ethical content in response to changing social and technological contexts so it remains relevant over time_. As social conditions, needs and attitudes change, the mechanism for balancing media standards and society's interests must reflect these changes. The expectations, practices and content of newspapers in an urban, industrialized and technologically sophisticated 1998 are significantly different than those of a predominantly small-town society of 1898. Distribution of news content over the internet introduces constraints and opportunities not present in a world of paper-only news delivery. The ability to adjust to changing environments and expectations is essential to maintaining a balance between the media and the social order.
4. _The approach must establish ethical standards at the professional or institutional level that are perceived as binding on the individual practitioner_. Most of the research on the effectiveness of codes of ethics finds little or no direct effect between codes and decisions journalists make unless there is an institutional environment

which reinforces specific ethical values. Based on a study of the Indianapolis *Star* and the Indianapolis *News*, Pritchard and Morgan concluded with Meyer that:

> If there is a link between the content of newspaper ethics codes and the behavior of journalists faced with ethical decisions, the link is almost certainly indirect and mediated by a wide variety of other factors. Unwritten professional norms may be the best predictors of behaviors In situations that give rise to ethical questions…[25]

Boeyink's study of ethical decision-making in three newsrooms with very different approaches to ethical guidelines and codes concluded:

> In the two newspapers with a visible concern for comprehensive ethical rules, two factors seemed critical: a commitment from newsroom leadership to ethical principles as institutional standards and an environment in which ethical issues were regularly discussed.[26]

These and similar research imply that absent a clear and vigorously cultivated institutional ethical standard, journalists will resort to personal values or unwritten, and perhaps unexamined, peer cultural values in making ethical choices. In such situations, meaningful normative discussions and accountability becomes impossible. This also implies the need to develop a consistent ethical culture across entire organizations. The newsroom cannot have one set of values while the business functions operate with a dramatically different ethical system. Although specific prescriptive focus and content may vary between departments, all organizational units must agree on a common set of core values and approaches to ethical decision-making. Failure to do so results in the organizational equivalent of a dysfunctional family and creates confusion for a public that is unsuited to draw fine distinctions between the internal functions of a single company.

---

[25] David Pritchard and Madelyn Peroni Morgan, "Impact of Ethics Codes on Judgments by Journalists: A Natural Experiment," Journalism Quarterly 66, no. 4 (Winter 1989): 941

[26] David E. Boeyink, "How Effective Are Codes of Ethics? A Look at Three Newsrooms," Journalism Quarterly 71, no. 4 (Winter 1994): 904.

5. *The approach must establish a basis for a sense of obligation on the part of the individual practitioner and include mechanisms for accountability through feedback to both the individual and the institution or profession.* One of the key features distinguishing journalism or mass communications from the traditional professions is the lack of enforcement mechanisms for ethical standards. In this country, many of the techniques used for enforcement in other professional areas -- licensing, government regulation, boards of review -- are culturally unacceptable and/or unconstitutional. This increases the difficulty of establishing and enforcing accountability but does not render such efforts impossible.

6. *The approach must tailor prescriptive content to the function and mission of the media organization.* This is not a call for ethical relativism but simply recognition that "the media" does not refer to a monolithic entity capable of compression into a single ethical mold. That we cannot apply the same expectations and standards to *The Washington Post* and Warner Bros. Studios is clear upon statement but is a distinction that is often lost once discussion turns to "the media." Even within print journalism, there is room to question whether a story alleging "Bill Clinton is an alien from outer space" would be viewed as ethically irresponsible in the same manner and degree if it appeared in the pages of *The National Inquirer* and *The New York Times.* Establishing accountability requires the identification of standards and expectations against which performance can be measured. To the degree that *The Times* and *The Inquir*er do fulfill and are perceived as performing different social functions, just as

advertising and journalism perform different roles, prescriptive ethical codes and standards for evaluation of performance must vary.

An Alternative Approach

Philosopher Andrew Brien has argued that any society requiring essential professions faces a dilemma.[27] Since non-professionals in the society are dependent on the skills and knowledge of the professional, they are essentially at the mercy of the profession. Although the services are essential, the community and the individual must find a way to "police the asymmetry of power"[28] between the profession and non-professionals.

The problem, for the profession, Brien claims, is "how can it regulate itself effectively so as to justify its autonomy, while ensuring that the clients of its members and the society as a whole benefit from the profession's and the individual professional's actions, rather than become their victims."[29]

Brien says societies have identified two options for tackling this problem -- government regulation/legislation and self-regulation by the profession. Government regulation, he observes, is frequently inefficient because legislators seldom understand the needs of the profession and legalistic regulations frequently subvert the ethical sense of practitioners. After all, if "right and wrong" were reduced to "legal or illegal," why would taking advantage of a morally questionable legal loophole trouble a professional? Simple self-regulation, however, is no panacea. Ethical codes are ineffective unless promoted and enforced; professional members are often reluctant to report or punish ethical violations, and professional organizations may lack the means to impose sanctions on rogue members.[30]

---

[27] Andrew Brien, "Professional Ethics and The Culture of Trust," *Journal of Business Ethics*, 17, 1998, 391-409.

[28] Ibid., 391.

The solution, Brien proposes, is to recognize that the basis of the professional-client relationship is trust[31] and to create mechanisms and a culture within the profession that force practitioners to act in ways that engender trust.[32]

Without arguing the separate issue of whether journalism is a profession, Brien's analysis seems to describe the essential conflict surrounding the issue of media behavior. With the development of mass media, a new class of workers -- journalists -- emerged as wielding enormous social power. For more than a century, society and media have struggled to find a mutually satisfactory way to balance that power with no more than momentary success.

The idea that the media function as a social institution is not new; it is, in fact, embodied in one fashion or another in each of the traditional approaches. What Brien's model adds to the conversation is the notion of a bargain between media organizations and society. It is a bargain between two social entities -- the media organization and the public it serves -- to achieve a balance of power. The media organization pledges it will provide certain promised services which are important to the functioning of society and

---

[29] Ibid., 392.
[30] Ibid., 392-394.

[31] Ibid, 399; J. S. Ellin, "Special Professional Morality and the Duty of Veracity," *Business and Professional Ethics Journal*, 1, 1982, 75-90.

[32] Of the characteristics of trust, Brien notes on page 399: "[R]elationships that are correctly described as involving trust contain an asymmetry of power: the trustee has power over the truster. ...To trust another, then, involves a feeling of security about another and a prediction about the behavior of that person, when that person has the capacity to damage you or something in which you have an investment. Specifically,

that it will not use its power to harm the public. The public agrees to allow the media to retain its power and freedom of action. From the making of the bargain spring sources of obligation; from its fulfillment comes mutual trust.

But, how does one go about making such a bargain? What is it that's expected of media organizations? Are they to become lackeys to the public whim?

With the bargain as a starting point -- provide services that benefit society and do no harm -- it seems possible to deduce the prescriptive standards for media performance although that effort is beyond the scope of this paper. Most of the traditional journalistic values seem likely to fit easily into this new model although their application may require reevaluation in light of the terms of the bargain. Interpreting the responsible application of the principle of truth telling, for example, may require closer attention to the distinction between information the public needs to know for healthy social functioning and information for which there may simply be an appetite independent of social need that creates unnecessary harm to individuals or some segment of the public.

Implementing the bargain requires media initiative. Although discussion and support at the broad professional level is important, the bargain must be made and kept by individual media organizations. First, the organization must operationalize what the promise means, identifying principles and prescriptive behavioral norms that embrace the entire company. Procedures must be created for periodic review and potential modification of the norms to reflect changes in circumstances or technology. While this sounds daunting, it is scarcely more complicated than the exercises companies routinely go through to develop vision or mission statements.

---

this feeling is directed at the trustee's underlying motivation or disposition; and it is that this is not directed at doing harm to you or things in which you have an investment and that she will act as anticipated."

Next, all employees must be thoroughly educated about these values and standards and taught how to interpret and apply them. Situations of potential conflict between values, particularly between economic interests and the obligations created by the social bargain, must be addressed straightforwardly. An environment must be created where discussion of ethical issues is deemed as relevant and appropriate as a discussion of circulation, Arbitron ratings or advertising revenue. Avenues for building personal employee commitment to the organizational values must be explored -- even non-traditional approaches such as having new employees recite a pledge. These steps, essential to creating an ethical corporate environment, are no more difficult than the diversity and customer service training initiatives undertaken by many companies in recent years.

Once the organization is thus prepared, the promise must be made. It must be public, concrete and specific. It must explain the values and commitment of the organization. It must be repeated regularly, not proclaimed once and then dragged out of the closet when the organization needs to justify some action resulting in a public clamor. Feedback and accountability mechanisms must be created both internally and externally. Regular and specific feedback from the public must be encouraged and must receive serious consideration and a response. One option is the creation of one or more ombudsmen to serve as conduits for information between the organization and the public. An internal ombudsman function is also needed as a referee for disagreements about ethical decisions within the company. Internal accountability must be clearly established with significant sanctions imposed for willful violations of ethical standards. Through this initially unilateral process, the promise can be made and kept, establishing a bond between the organization and its public.

A Research Agenda

Exploration and development of this model suggests several research issues. The early steps are fairly clear; the later steps are less well defined and will obviously be affected by the results of early research. The plan is to pursue the research with a focus on newspapers in the belief that subsequent research could be used to confirm the generalizability of findings to broadcast and other media.

The first step is to test the fundamental assumption regarding a relationship between public/professional ethical values and the cultivation of a relationship of trust. This phase will begin in Fall 1999 or Spring 2000 with the administration of a questionnaire designed to measure key journalism-related ethical values to journalists at one or more daily newspapers and of a companion survey to randomly selected members of the public in the area served by the publication(s). Appropriate statistical techniques will be used to determine whether there appears to be a relationship between shared values and newspaper/public trust and to explore which values appear to be most influential. If a relationship is identified, the study will be replicated in markets in different areas of the country to determine whether there are regional differences that affect the generalizability of the findings.

The second step is to use the data from the initial studies, newspaper financial information, and market data to determine whether there is a relationship between the level of public trust and the financial performance of the newspaper. Specifically, when controlling for the purely economic variables in the market and variables related to ownership, do newspapers with higher levels of public trust enjoy economic advantages over those with lower levels of public trust. Identifying such benefits is key to creating a "business case" for a commitment to ethics.

The third step is to administer ethics questionnaires to business-side staffers and managers at the newspapers previously surveyed to identify areas of congruence and divergence between editorial and business employees. The hypothesis is that there is a greater level of congruence than one might expect and that this core of shared values can become the nucleus for developing a uniform, company-wide set of ethical standards.

The fourth step is to combine the findings of previous research regarding ethics codes with the survey findings to identify critical ethical values that reflect the strongest traditions of the journalism profession and are related most strongly to the cultivation of a relationship of press/public trust. A framework including these and other strong organizational values driving media behavior -- such as profitability and customer service, for example -- should be constructed. Higher level analysis should be used to identify underlying assumptions and the relationships between the factors. The implications of this model for the institution's relationship with the public, government, advertisers, employees, and other stakeholders must be identified and explored. This model should be viewed as a template or prototype, reflecting certain core professional values shared by the press and the public but capable of modification from newspaper to newspaper to reflect the individual institution's perception of its desired relationship to its community/public.

Once this theoretical framework is developed, the next step is to draw on organizational development theory to design processes for adapting the model to individual institutions, for developing individual and organizational commitment to a common set of ethical values, and for establishing internal mechanisms for monitoring, establishing accountability, dealing with internal and external feedback, and on-going education.

Finally, one or more newspapers willing to undertake a pilot project should be identified. The process of organizational change and public commitment should be implemented and a long-term study of the effects on employees and newspaper/public trust levels should be initiated.

In Conclusion

This approach appears to meet the criteria identified as essential to a workable approach to media ethics. It is practical in that none of the steps require organizational or social change exceeding the parameters regularly undertaken by organizational development professionals and the process for identifying organizational standards can and should include all departments and issues. The process of values clarification, employee education, and promise publication should encourage clear and understandable standards for employee decision-making and for public evaluation of the media organization's behavior. Public feedback mechanisms, periodic reviews of standards and internal mechanisms for addressing disagreement should provide the responsiveness to change that's required for on-going relevance. The process for establishing organizational-level standards, internal rewards and punishments for adherence to the standards and the creation of an ethically sensitive environment creates a top down system of values for the individual practitioner. The nature of the bargain, its publication, and the creation of public feedback mechanisms create obligation and accountability for the organization. Finally, since the initiative is made at the individual organizational level, the prescriptive content will inevitably reflect the function and mission of the organization.

This analysis and proposed research agenda suggests an approach to media ethics that creates a basis for obligation and addresses many of the deficiencies that appear to exist in traditional approaches. In its present state, it also leaves unanswered many questions and is vulnerable to criticism on several fronts.

Perhaps the most obvious criticism is that it reduces media ethics and obligation to a pragmatic balance of power and survival issue. The only response to that is that other theories of obligation for the media involve assumptions far less amenable to consensus than the notion of conflict between social interests and social institutions. A second basis for criticism is that media owners are unlikely to adopt such an approach if it doesn't clearly contribute to the bottom-line. The response to that is that media owners have shown a remarkable capacity to recognize the business case for issues such as workforce diversity and customer service. A convincing business case for a social contract that can increase media credibility and audience -- and therefore profitability -- is not hard to imagine.

The unanswered questions -- opportunities for further research and reflection -- are many. They provide a fertile opportunity for further reflection and research.

SCT group

Framing an Environmental Controversy in India's English-language Press: A Study of Text in Context

By:

Dr. Elizabeth Burch

Sonoma State University
Department of Communication Studies
1801 East Cotati Avenue
Rohnert Park, CA
94928-3609

Phone: (707) 664-4059
E-mail: Elizabeth.Burch@sonoma.edu

Paper presented at the
82nd Annual Conference of the
Association for Education in Journalism and Mass Communication
New Orleans, Louisiana, August 3-8, 1999

ABSTRACT

Framing an Environmental Controversy in India's English-language Press: A Study of Text in Context

BY

DR. ELIZABETH BURCH

This contextual analysis adapts Shoemaker and Reese's theoretical framework of the hierarchy of intra- and extra-organizational influences to investigate whether the framing of the environmental sustainability and development debate in India was affected by constraints upon reporters from two of India's leading English-language newspapers reputed to follow opposing political ideologies: pro-government and anti-government. It was found that the papers' political ideologies did not necessarily affect their support for environmental sustainability or economic development paradigms, thus the notion of hegemony did not prevail in this case. Themes of advocacy versus objectivity, freedom of the press, market journalism and cultural values strongly motivated environmental reporting. As in the Shoemaker and Reese model, intra-organizational cultural factors were most influential in framing coverage of the environment.

Introduction:

This paper examines the performance of the Indian English-language print press as it pertains to a particularly salient debate on the environment in developing countries today: that economic development may be in conflict with environmental sustainability. One highly controversial hydro-electric project, the building of the Narmada Dam in Western India, illustrates that debate quite clearly. In light of Gramsci's notion of hegemony, the study investigates the context of press performance in India, as well as the portrayal of the Narmada Dam issue in national newspapers. It examines the following questions about environmental journalism in India: 1) How was the Narmada Dam controversy "framed" in the Indian English-language press? 2) What contextual factors, forces and actors most influenced framing of the Narmada Dam controversy there? 3) What is the relationship between Narmada coverage and the levels of influence in which the Indian press operate? The purpose is to lead to a better understanding of the constraints imposed upon environmental journalists in developing countries, such as India, who cover this complex economic development/environmental sustainability debate.

This exploratory study sheds light on the "culture" of environmental journalism in India and is a step in understanding the role that contextual forces play in the media's portrayal of environmental issues. In addition, it provides evidence that models of levels of influence upon news content are useful tools in explaining press performance in developing countries, just as they are in the west. However, hegemony theory may not always apply within a Third World context.

Since the lion's share of communications research on environmental journalism has been conducted within a Western context, theoretical perspectives on press performance are predominantly Western-oriented. By focusing on one case study of environmental journalism in a developing country context, this study assesses the validity of Western press performance theories as they address the stark realities among the Third World press. Thus, the investigation is likely to generate new hypotheses for future research on the topic.

Background:

In the world today the dominant paradigm of the belief in mastery over nature or progress through science and technology,[1] is said to be giving way to a new environmental paradigm.[2] This shift toward concern for the environment is meant to show the link between growth and a normative ethic of environmental sustainability.[3] Yet the reality in developing countries is that a heavy burden of foreign debt and a lack of capital has pushed the South to bypass some environmental protections. Thus economic development has become the dominant goal.

---

[1] Anders Hansen, "The Media and the Social Construction of the Environment," *Media, Culture and Society* 13 (1991): 443-458.

[2] Riley E. Dunlap and K. D. Van Liere, "Commitment to the Dominant Social Paradigm and Concern for Environmental Quality," *Social Science Quarterly* 65 (1984): 1013-1028; Priscilla Murphy and Juliet Dee, "Reconciling the Preferences of Environmental Activists and Corporate Policy-Makers" (Paper presented at the International Communication Association, Albuquerque, New Mexico, May 1995): 1-36.

[3] World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987); Robert Goodland, Herman Daly, Salah El Serafy and Bernd von Droste, eds. *Environmentally Sustainable Economic Development: Building on Bruntland* (Paris: UNESCO, 1991).

In India, a country the United Nations Development Program ranks among one of the least developed in the world, modernization has often led to environmental degradation.[4] Yet the push toward environmentally sustainable development remains a critical concern. Within the locus of what has become a major controversy, stands the press. As Indian scholar Badri writes, "Journalism has come a long way to witness the day when the fragile earth depends so highly upon the competency and proficiency of journalists."[5]

Numerous constraints color coverage of the environment in India. Although a democratic nation today, government threats to press freedom still exist as they did during the print press' tenuous beginnings under British colonial rule in the year 1780.[6] Subtle pressure on content comes in the form of taxes or control of imported newsprint (on which the press is highly dependent), licensing of imported printing machinery and prohibition of subscriptions to foreign news agencies. The government also controls accreditation of journalists. Likewise, government advertising accounts for about 30 percent in Indian dailies, thus pressure from government advertisers is a concern.[7] Additional pressures include government surveillance of press activities and physical assaults and arrests of journalists, although direct attacks are rare and typically limited to rural-based regions.[8]

Despite these and other constraints, Indian correspondents write on pivotal environmental issues, trying to address the economic development/environmental sustainability question.[9] As this and other studies show, the job is a formidable one.[10] The complexity of issues the press negotiate in covering the environment in India is well illustrated in the hotly debated case of the Indian government's Narmada Dam development project, initially funded by the World Bank. Originally conceived in the 1940s, the $3.6 billion project typifies many of the problems economic growth can impose on landless tribal peoples. The fight over Narmada has become highly politicized. Consequently the issue has received extensive coverage in the Indian press.

Literature Review:

As Gurevich and Levy write, the media become "a site on which various social groups, institutions and ideologies struggle over the definition and construction of social reality" or meaning.[11] Thus, as Tuchman finds, news is a "negotiated enterprise."[12] It is the contextual forces within which the press operate that affects news content or "framing" of the news. [13] In defining frames, Goffman writes, "Frames are schemata of interpretation" used to "locate, perceive, identify and label."[14] Gamson and Modigliani maintain the organizing structure of the news story is the frame, which helps give meaning and make sense of the issue.[15] The press are part of a larger social environment[16] and the framing of news is "the end-product of a complex process."[17] But how can we explain this process?

---

[4] *Human Development Report* (Oxford: Oxford University Press, 1995).

[5] M. A. Badri, "Mass Communication and the Challenges on Global Environmental Protection," *Journal of Development Communication* 1, no. 2 (1991): 1-16. (see p. 15)

[6] J.S. Yadava, "Press Systems in India," 132-136, 142-147; "Family Settlement will Split Indian Express, *India Abroad*, 17 Feb. 1995.

[7] Hemant Shah, "Factors Influencing Development News Production at Three Indian Dailies," *Journalism Quarterly* 67 (Winter 1990): 1034-1041.

[8] Ela Dutt, "Treatment of Journalists is Assessed," *India Today*, 24 March 1995, 36.

[9] Such as Darryl D'Monte, Bittu Sahgal, Demandeep Singh, Kalpana Sharma and others.

[10] Sharon M. Friedman and Kenneth A. Friedman, *Reporting on the Environment: A Handbook for Journalists* (Bangkok, Thailand: The United Nations Economic and Social Commission for Asia and the Pacific, 1988); Sharon M. Friedman, Sharon Dunwoody, and Carol L. Rogers, *Scientists and Journalists: Reporting Science as News* (NY: The Free Press, 1986).

Dunwoody and Griffith[18] apply the theory of news "frames," in an examination of stories about environmental risk in the United States.[19] They investigate how reporters write about highly controversial issues, saying it is possible to "see" the impact of a political structure on the news. Their study shows that the homogeneity or heterogeneity of "community structures" in which the press are based affects quality of coverage of environmental issues.[20] Thus, reports in pluralistic settings were more likely to reflect conflicting views then news in less diverse communities. Dunwoody and Griffith also note that "occupational and organizational norms" play a key role in framing environmental news as well. Further cataloguing of factors playing a part in the news production process helps to facilitate analysis. For instance, Hirsh examines trends in the study of mass communications identifying what he calls "closed system" (occupational and organizational) and "open system" (external institutional) research.[21]

---

[11] Michael Gurevich and Mark R. Levy, eds. *Mass Communication Review Yearbook* 5 (Beverly Hills, CA: Sage, 1985), 19.

[12] Gaye Tuchman, *Making News* (NY: The Free Press, 1978) 6.

[13] Herbert J. Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time* (NY: Vintage Books, 1979).

[14] Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience* (NY: Harper and Row, 1974).

[15] William A. Gamson and Andre Modigliani, "Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach," *American Journal of Sociology* 95, no. 1 (1989): 1-37

[16] Allan Rachlin, *News as Hegemonic Reality: American Political Culture and the Framing of the News* (NY: Praeger, 1988).

[17] Stuart Hall, Chas Critcher, Tony Jefferson, John Clarke, and Brian Roberts, *Policing the Crisis: Mugging the State, and Law and Order* (London: MacMillan Press, 1978), 53.

[18] Sharon Dunwoody and Robert Griffin, "Journalistic Strategies for Reporting Long-Term Environmental Issues: A Case Study of Three Superfund Sites," In *The Mass Media and Environmental Issues*, edited by Anders Hansen (London: Leicester University Press, 1993), 22-50.

[19] Michael R. Greenberg, David B. Sachsman, Peter M. Sandman, and Kandice L. Salomone, "Risk, Drama and Geography in Coverage of Environmental Risk by Network TV," *Journalism Quarterly* 66, no. 2 (1989): 267-276; Peter M. Sandman, David B. Sachsman, Michael R. Greenberg, and Michael Gochfeld, *Environmental Risk and the Press* (New Brunswick, NJ: Transaction Books, 1987).

[20] Dunwoody and Griffin, "Journalistic Strategies for Reporting Long-Term Environmental Issues: A Case Study of Three Superfund Sites," 22-50.

[21] Paul Hirsch, *Strategies for Communication Research* (Beverly Hills, CA: Sage

BEST COPY AVAILABLE

In their study of media content, Shoemaker and Reese develop a model of a hierarchy of influences on reporting from an individual- to societal-level.[22] The micro to macro level analysis identifies five predictors on content (respectively): professional norms; media routines; the role of organizations; "extra-media" factors (such as government intervention, advertisers or audiences); and affect of ideology on news practices. The model facilitates study of the "sociology of news," by looking at how content is shaped by the characteristics of the media, media workers and the media environment.

Shoemaker and Reese note that levels tend to overlap, often one blending into another. A look at professional norms and media routines, for example, illustrates this overlap. Environmental reporters in the U.S. become socialized into the field of journalism, adapting to professional (or "occupational") norms of the job.[23] They are said to embrace the "noble ideals" of responsibility and objectivity, which create a standard in the field. Yet in his book, Deciding What's News, Gans writes that the ideal of objectivity is rarely ever attained in full.[24] One reason could be the role of routines — those repeated patterns or practices that facilitate decision-making under deadline. The profession routinizes the news gathering process through beat coverage, which fosters a heavy reliance on "routine channels" — press releases, press conferences and so on.[25] The problem is that news from routine channels is often manipulated by interest groups hoping to "build the agenda" of the press.[26] Likewise the over-use of "official channels" of a beat, such as governmental experts, may also bias the news.[27]

Shoemaker and Reese's model can be used to explain why the media frame issues in certain ways. For example, Gitlin discusses how the perceived pressure of the economic interests of news organizations can influence the selection of stories by gatekeepers[28] of certain versions of reality over others.[29] In environmental news, the press tend to emphasize "sexy" or sensationalized issues, such as stories on certain endangered species (whales over plankton) because they are more likely to sell a story to the audience. Likewise, since media operate within a larger extra-media context, Gitlin, who examines hegemony, says that core ideological systems affect the framing of news in ways that are consonant with the prevailing power structure. This can be seen in the portrayal of the Exxon Valdez oil spill in Prince William Sound where the U.S. mainstream press marginalized native American concerns.[30] Thus environmental stories are often oversimplified leaving out minority voices in a controversy. As Gitlin notes, referring to hegemony theory,[31] with reality emerging from the "omnipresent media...the media have become core systems for the distribution of ideology" (and selected realities which can reflect biases).[32]

---

[22] Pamela J. Shoemaker and Stephen D. Reese, *Mediating the Message: Theories of Influences on Mass Media Content* (NY: Longman, 1991), 54.

[23] Warren Breed, "Social Control in the Newsroom: A Functional Analysis," *Social Forces* 33, no. 1 (1955): 326-335.

[24] Gans, *Deciding What's News.*

[25] Leon Sigal, *Reporters and Officials: The Organization and Politics of Newsmaking* (Lexington, MA: DC Heath, 1973).

[26] Dan Berkowitz, "TV News Sources and News Channels: A Study in Agenda-Building," *Journalism Quarterly* 64 (Summer/Autumn 1987): 508-513.

[27] Some among the press in India have suffered from a lack of credibility due to the acceptance of bribes (money, favors, etc.) from government officials seeking positive publicity. See Dinanath Mishra, "India's Scribes Who Take Bribes," *India Post*, 1 September 1995, A 20; "Credibility Crisis for Lucknow Newspapers," *The Hindu*, 4 August 1995, 9.

[28] D. M. White, "The Gatekeeper: A Case Study in the Selection of News," *Journalism Quarterly* 27 (1950): 383-390.

[29] Todd Gitlin, *The Whole World is Watching* (Berkeley, CA: University of California Press, 1980).

Looking at environmental news in a South Asian context, Friedman and Friedman studied the constraints at play in environmental news, identifying several factors specific to the regional context that affect content.[33] These include a lack of financial commitment to support coverage of rural-based issues or science training for journalists; inadequate press laws against censorship (such as the Freedom of Information Act); price fixing of raw materials, like paper; as well as a variety of other factors, each of which could be catalogued to fit into the Shoemaker/Reese model. Shah's study of "societal, occupational and communicator-level factors" in India showed that the content of Indian news can not be attributed to one single factor or set of factors at only one level.[34] This being said, one can ask if some factors and levels are more influential than others when it comes to examining environmental news in India and why is this so?

Conceptual Framework:

The hierarchy of levels of influence provides a useful conceptual framework for understanding what affects newsmaking because with so many factors at play it is difficult to identify which are the most formidable. The Shoemaker and Reese model of the levels of influences on mass media content illustrates that constraints on the press are indeed hierarchical.[35] The implication is that micro-level factors are the most influential in predicting the portrayal of news content. By combining the "levels of influence" paradigm with framing theory, inquiry into the linkage of content with constraints on press performance is facilitated. For instance, in Liebler's investigation of the framing of civil disorder in newspapers in the U.S., she found that social structural variables predicted framing most consistently.[36] The task of assigning a hierarchy remains confounded, however, since as Liebler found, the organizational level was not necessarily subsumed by more macro-level factors. In fact, newsroom diversity also played a significant role in the framing of controversies. For instance, in Gandy's study on the media's framing of U.S. minorities in the news, he finds that not only are the proportion of African Americans in the marketplace a powerful explanatory factor for the framing of race in the news but the racial makeup of newsroom staff also plays an important role.[37]

---

[30] Patrick Daley and Dan O'Neill, "'Sad is Too Mild a Word:' Press Coverage of the Exxon Valdez Oil Spill," *Journal of Communication* (August 1991): 42-57.

[31] Wherein a ruling coalition advances the interests that function according to a dominant political economy. See Daley and O'Neill, "'Sad is Too Mild a Word:' Press Coverage of the Exxon Valdez Oil Spill," 44; Antonio Gramsci, *Selections from the Prison Notebook of Antonio Gramsci* (London: Lawrence and Wishart, 1971); Denis McQuail, *Mass Communication Theory: An Introduction*, 2nd ed. (London: Sage, 1987).

[32] Gitlin, *The Whole World is Watching*.

[33] Sharon M. Friedman and Kenneth A. Friedman, "Environmental Journalism: Guardian of the Asian Commons," *Environment* 31, no. 5 (1989): 7-37; S. M. Friedman and K. A. Friedman, *Reporting on the Environment: A Handbook for Journalists*.

[34] Shah, "Factors Influencing Development News Production at Three Indian Dailies," 1040.

[35] Shoemaker and Reese, *Mediating the Message: Theories of Influences on Mass Media Content*.

In examining which levels may be most influential, Liebler finds that factors operative on different levels change with the context. Liebler's research, among others, provides a basis for study into the levels of influence on environmental news frames in a non-western context. Likewise, a contextual approach toward press performance lends inspiration for the reconceptionalization of the classic Shoemaker and Reese model. It is therefore possible to examine a new framework of a hierarchy which analyzes the extra- and intra-organizational political, economic and cultural levels of influences on framing.[38] In the case of news on development and environment issues in the Third World, a lexicon of the factors, forces and actors[39] in the context of India that have may have a relationship to coverage of the Narmada Dam project in the Indian English-language press provided a useful framework for analysis (see Figures 1 and 2).

---

[36] Carol M. Liebler, "Individual, Organizational and Social Structural Influences on Newspaper Framing of Civil Disorder," (Paper presented at the International Communication Association, Montreal, Canada, May 1997).

[37] Oscar Gandy, "From Bad to Worse: The Media's Framing of Race and Risk," *Media Studies Journal* (Summer 1994): 39-48.

[38] Bella Mody, "Development Communication: From Media Effects to Media Contexts," *Media Development* 3 (1988): 35-37; Shoemaker and Reese, *Mediating the Message: Theories of Influences on Mass Media Content*.

[39] S. M. Friedman and K. A. Friedman, "Environmental Journalism: Guardian of the Asian Commons"; S. M. Friedman and K. A. Friedman, *Reporting on the Environment: A Handbook for Journalists*.

FIGURE 1

The Relationship of Extra-Organizational Context to Text

CONTEXTUAL FACTORS
(Data collected)
via interviews

I) EXTRA-ORGANIZATIONAL
(SOCIETAL) FACTORS

A. **Political Level**
1. Access to Sources
a. intergovernmental donor agencies
(such as the World Bank)
b. foreign governmental donor agencies
c. national government
d. impacted state governments
(Maharashtra, M. P., and Gujarat)
e. local (village) governments
f. international, national, state
or localized industries
g. international or domestic
environmental activist organizations
h. international or national
university-affiliated scientists
i. domestic courts
j. non-affiliated
impacted villagers

2. Government Control
a. press laws (censorship:
prior restraint in periods of
national "emergencies")
b. denial of citizenship
c. arrest (and violence)
d. access to documents
e. bureaucracies
f. newsprint supply
g. low rent in government buildings
h. threat of government libel suits

B. **Economic Level**
Externalities
a. "vested" advertiser revenue
(pressure from dam-related
industries)
b. "vested" government revenue
(pressure from government)
c. newspaper circulation
(pressure to maintain)
d. investors to newspapers
(pressure from industry)
e. threat of private libel suits
f. government licenses
g. tax on raw materials (paper)
h. competition with foreign media
i. competition with domestic media
j. innovations of news technologies

C. **Cultural Level**

1. Target Audience Interest
a. urban elites (readers, electronic media)
b. regional readers (vernacular press)
c. audience cultural resonances perceived
by reporters

CONTENT CHARACTERISTICS
(Data collected
via content analysis)

NOTE: Characteristics
below repeat for each
contextual factor)

Tone

Prominence
Type of Story
Kinds of Sources
Themes

BEST COPY AVAILABLE

FIGURE 2

The Relationship of Intra-Organizational Context to Text

II) INTRA-ORGANIZATIONAL FACTORS
A. **Political Level**

1. Practitioner Ideology
a. publishers (party membership)
b. editors (party membership)
c. reporters (party membership)

2. Historical Development of Press
(British colonialism; freedom movement; elite press issues versus vernacular press issues; development journalism.

B. **Economic Level**
1. Business Orientation
a. type of ownership
(private ownership, family squabbles)
b. employer/employee relations
(capricious management policies affecting rights and freedom of editors and reporters; job/salary uncertainties; union membership)

2. Financial Commitment
funding of environment beat (reporters' science literacy training; travel to environmental sites; number of environmental reporters; resources: number of wire services and news agencies subscribed to, kind of wire services and news agencies used, such as foreign or domestic, access to Internet sources)

C. **Cultural Level**
1. Gatekeeper Bias

(lack of interest in environmental stories: political emphasis; rural/urban or Northern India/Southern India orientation)

2. Routines

(environment beat; source/document selection and use, such as press releases; subscription to environmental journals; rapport with sources; deadline pressures)

3. Professional Norms
(journalism education, accreditation; lack of prestige; membership in professional organizations, such as the Asian Forum of Environmental Journalists, Society of Environmental Journalists, etc.; environmental advocacy approach); objectivity tradition
4. Individual Background

Content Characteristics
(Data collected
via content analysis)

Note: Characteristics below repeat for each contextual factor)

Tone
Prominence
Type of Story
Kinds of Sources
Themes

Research Questions:

The following question (condensed from several individual questions) was examined that led to a contextual analysis of environmental coverage in India:

(Q1): Which extra- and intra-organizational political, economic and cultural factors most affect news of the Narmada Dam in The Times of India (a pro-government paper) in comparison to the Indian Express (an anti-government paper)?

The content analysis study of coverage of the Narmada Dam in India looked at the following questions:

(Q1): Did the pro-government newspaper under study (The Times of India) tend to publish more stories with pro-dam headlines or conditional pro-dam headlines (prominence) on the Narmada Dam issue), while the anti-government newspaper (the Indian Express) tend to publish more anti-dam headlines in stories of the issue?

(Q2): Was The Times of India more likely to use the names of famous pro-dam "stars" (a form of prominence dealing with sensationalism) of the Narmada Dam controversy than anti-dam "stars" in headlines for stories on the issue, while the Indian Express was more likely to use the names of famous anti-dam "stars" of the Narmada Dam controversy than pro-dam "stars" in headlines for stories on the issue?

(Q3): Did The Times of India tend to publish a more pro-dam tone (considered as bias in editorials, features or hard news/features), while the Indian Express tended to publish a more anti-dam tone?

(Q4): Did The Times of India tend to include more pro-dam kinds of sources (Indian government, industry and pro-dam non-governmental organizations), while the Indian Express tended to include more anti-dam kinds of sources (villagers and anti-dam non-governmental organizations)?

(Q5): Did The Times of India tend to emphasize economic development or quantification themes (arguments) in stories on the dam, while the Indian Express tend to emphasize more environmental sustainability themes (arguments)?

(Q6): Did The Times of India tend to publish more episodic (hard news) stories on the Narmada Dam issue, while the Indian Express tended to publish more thematic (analysis, features or editorial) stories of the issue?

Method:

A period of three months of fieldwork was undertaken in India from November 1995 to January 1996 to conduct in-depth interviews with reporters and editors from the Indian English-language press and collect newspaper articles on the Narmada Dam issue. Initially 18 reporters from nine Indian English-language dailies participated in one hour interviews based on a prepared list of open-ended questions developed from Figures 1 and 2. The questions examined the journalists' perspectives on internal and external political, cultural and economic constraints on environmental reporting in India. In particular, subjects were asked to recall their experiences in covering the Narmada Dam controversy in light of various factors, including the political, economic and cultural environment in India, as well as within the media industry itself. From the data collected, two newspapers: The Times of India and the Indian Express were selected for comparison in this study based on the following criteria: 1) Both are said to exercise an important agenda-setting role among policy-makers in government as well as the vernacular (regional) press;[40] 2) Both are among the largest circulation of English-language newspapers in India;[41] and 3) The Times of India is characterized by Indian reporters as a paper most closely aligned with the government of India and supportive of its development agenda, while the Indian Express is considered to be least aligned with the government, thus providing variance in the study.

The Narmada dam is a project that will have a great impact in India. That impact could be negative or positive depending upon various positions purported by stakeholders involved. The years 1989 to 1993 were considered a critical period in the evolution of the debate over the dam, thus a purposive sample of 194 news articles from that time published in The Times of India (120) and the Indian Express (74) were content analyzed.[42] Coverage was coded according to the following variables: prominence (headlines – pro or anti-dam and sensationalized), editorial tone (pro or anti-dam), kinds of sources (pro or anti-dam), environmental sustainability or economic development themes (pro or anti-dam) and story type (shorter hard news or longer features/editorials). The data were organized into crossbreaks. Cramer's V and Phi were the statistics used to measure the degree of association between variables. After pretests of the instrument were conducted, two researchers coded a random sample of 20 percent of the stories included in the study in order to assess intercoder reliability. Holsti's formula produced agreement between 90 percent to 98 percent of the time for the nominal level data. Scott's pi (which corrects for chance agreement between coders) averaged at 84 percent. One measure, editorial tone, produced a Scott's pi of 65 percent, however only three cases out of the 40 articles sampled fit this category. The level of Scott's pi is very sensitive to the total cases used in the test. Holsti's agreement on the same measure produced a result of .98, which was deemed acceptable. Pearson r correlation coefficients on the number of sources in stories produced an average of 99.2 percent.[43]

---

[40] Mazharul Haque, "Is Development News More Salient then Human Interest Stories in Indian Elite Press?" *Gazette* 38 (1986): 83-99.

[41] John C. Merrill and Harold A. Fisher, *The World's Great Dailies: Profiles of Fifty Newspapers* (NY: Hastings House, 1980). Hamish McDonald, "Changing Times," *Far Eastern Economic Review* 24 March 1994, 22-23, 26.

[42] While Pro-government published more articles than Anti-government, articles in the latter tended to contain one more paragraph on average (Pro. had a mean = 9.5; Anti. had a mean = 10.5), thus were a bit longer. While longer articles are often interpreted to be more in-depth, this is not necessarily so in this case. Future studies should examine length of article in terms of word count.

Interview Data Findings:

Based on Question 1 for the contextual analysis of environmental reporting in India, we expected framing decisions on coverage of the Narmada dam to be influenced by a variety of intra- and extra-organizational factors. The task was to identify a hierarchy of constraints upon press performance and see if there were any differences in this hierarchy between papers with opposing political ideologies. The primary difference in decision-making between the papers was an extra-organizational factor: The Times of India and the Indian Express had somewhat different audiences in terms of political ideology, thus it was expected that positions of the dam would vary accordingly. However, although readers between the papers might hold opposing views of government plans for national development, the majority shared similar characteristics in terms of education and socio-economic status.[44] Thus, according to interviewees, the approach to writing environmental stories between the papers were fairly similar, despite the internal political pressure from management to take respectively opposing stands on economic development issues. Interview subjects at both papers said that internal journalistic cultural values (gatekeeping practices, development of an environmental beat and views on advocacy versus objectivity) were stronger than the differences in political ideology between their publishers. It was found that on almost all factors at both papers the journalists felt they worked under similar kinds of constraints.

The intra-organizational cultural level was found to be the most influential upon media content, according to the journalists' self reports. In response to questions about what sorts of factors affected their reporting on environmental issues, journalists from both papers attempted to characterize their level of commitment to the beat. All described themselves as environmental advocates and all were also "anti-dam" (with qualifications). Most were quite vocal on the point and said they faced a good deal of ridicule for being too "pro-environment". Journalists also said they were still committed to the ideal of objectivity, however, which presented a paradox not often explicitly discussed in American journalistic circles. In other words, although they openly expressed the opinion that the dam would lead to detrimental effects on villagers, their stories were generally constructed to include sources from both sides of the issue. "We have tried to tread a very narrow path between supporting environmental causes and developmental causes," said one reporter. "I have tried to take a balanced position whenever possible." Another reporter interviewed agreed with this stance but complained that the standard of objectivity was sometimes taken to a level of absurdity. "If you see a lot of people being beaten up," she said, "you are going to report that. You are not going to sit back and say, 'Let us be objective.'"

While concern for credibility played a part in balancing the use of sources, framing of stories on the dam was in part due to routines of the newsroom. For instance, most of the sources readily available to urban-based reporters were pro-dam government officials. Thus, those kinds of sources were often included in pro-environmental stories because the already "overburdened journalists" felt institutional sources were so accessible. On the other hand, the activist group, the Narmada Bachao Andolan (NBA) – the Save Narmada Movement, managed to generate and sustain interest in the anti-dam side of the story as well since its leader, Medha Patkar, was very charismatic. The story made the news because of Patkar-driven large scale events, like demonstrations and hunger strikes, that fit the news values of the press (it was hard news). Also, the NBA provided easy access to information on an almost daily basis via faxed press releases on the topic to the newsroom.

---

[43] Reliability indexes: Editorial Tone (Scott's pi =.65/Holsti = .98); Headlines Focus on Stars (pi=.92/H=.98); Headlines Pro/Anti Dam (pi=.86/H=.93); Story Type (pi=.90/H=.95); Theme (pi=.87/H=.90).

[44] As perceived by the interview subjects, not readership surveys.

Access to information was a key concern for all the interview subjects. Most were members of the Forum for Environmental Journalists of India (FEJI) but said that the organization needed to become more active if it was to provide any real support of journalists in the workplace. All said that the organization had suffered due to a lack of funds that would provide infrastructure support, such as the development of e-mail capabilities and so forth. A lack of leadership in the organization was also a problem. One reporter said that the culture of journalism in India is too competitive for FEJI to survive. To overcome this need to hoard information, as one reporter said jokingly, "I think the person who should run this organization should have a pathological need to disseminate information."

All the journalists said they felt that management views, such as a lack of interest in environmental issues, played a strong role in affecting their reporting on the environment. Later on in the controversy (about 1994), this led to quite a struggle for one of the interviewees. Finally, he, along with three other senior editors, resigned from their paper because of the pressure from management to avoid coverage of certain issues, including the Narmada Dam. The journalist recounts the time his managing editor let it be known that it would be policy to avoid any stories about the anti-dam activist Medha Patkar. Thus, for him this made it explicit what kind of power management exerted over content in the paper. If Patkar's picture or name came with the story it would not be published. Management said that was due to the drop in circulation of the paper that would occur at the mention of her name. The interviewee for the study said, however, that everyone knew the real reason -- the advertisers in effected areas in the western Indian states would threaten to withdraw their advertisements from the paper each time a story on the dam would include Patkar.

Viewed collectively, the qualitative data fit into a series of patterns wherein certain over-riding themes constraining coverage were repeatedly mentioned. The themes included: the tension between objectivity and advocacy journalism, the democratic value of a free press in a developing nation such as India, India's policy of economic liberalization, which created a market-based approach to journalism, and cultural resonance (the cultural values of the audience).

Content Analysis Findings:

It would appear India's two leading English-language newspapers frame environmental news regarding the controversial Narmada more similarly than not, in spite of differences between them in terms of political ideology. The exception was in the case of framing of headlines.

For content analysis questions 1 and 2, which examined whether headlines would vary between the pro-government The Times of India and the anti-government Indian Express, some differences were detected between papers (SEE APPENDIX FOR

TABLES). The Times of India used more pro-dam and conditional headlines[45] than the Indian Express (There were over 10 percent more pro-dam and conditional headlines in The Times than the Express). Likewise, The Times of India tended to publish more headlines with pro-dam stars' names than the Indian Express (the Express used anti-dam stars in headlines 10 percent of the time more than The Times). Both these findings do reflect minor differences in editorial policy toward the Narmada Dam. Thus there may be limited evidence to justify a hypothesis that pro-government papers in India support the building of the Narmada Dam more than anti-government papers. However, since the data indicated a fairly weak relationship between the ideology of each paper and their use of headlines (See Phi and Cramer's V for both variables in Tables 1 and 2 in appendix) a stronger hypothesis from this finding may be that Indian-English language papers are likely to sensationalize the Narmada Dam issue in order to sell papers. The focus on colorful personalities on the issue presented in headlines approximately 30 percent of the time provides some evidence for this argument.

Answering questions 3, 4 and 5, both papers published similar content in terms of editorial bias (tone), kinds of sources included and themes emphasized. Based on editorial bias and themes, both papers typically expressed some level of anti-dam bias, despite the decidedly pro-government/pro-development stance of The Times of India (Tables 3-7 in appendix). For instance, stories in both papers reflected more environmental sustainability themes than economic development themes (84 percent within The Times of India and 86 percent with the Indian Express). The sustainability argument most emphasized within both papers included those that focused on the ideas of "protest", "human and environmental impacts", and "review of the project". In terms of sources, however, there seemed to be a balance in coverage of the issue. Both papers used close to an equal percentage of pro-dam and anti-dam sources. The most used source was government officials, followed closely by anti-dam non-governmental organizations and villagers. As stated above, the use of sources is probably less a factor of bias in reporting and more due to routines of the beat.

Answering question 6 the data shows that both papers tended to over-simplify the issue by presenting the majority of stories in the form of hard news (Table 8 in the appendix shows approximately 80 percent). The assumption was that feature pieces tend to be longer and thus provide space for the complexity of discussions in debates over environmental sustainability and economic development.

---

[45] Conditional headlines were those that accepted the viability of the project yet had concerns about the process of implementation.

Discussion:

The overall aim of this study was to examine the relationship between those factors, forces and actors that constrained press performance in English-language newspapers in India and the portrayal of environmental news in India's two opposing English-language newspapers. Although we expected framing decisions might vary more on a controversial environmental issue (like the Narmada Dam) between a newspaper with a pro-government and an anti-government editorial stance, with the exception of prominence (headlines) in framing, this was not the case. Thus the prevailing power structure in India did not necessarily affect the framing of environmental news within the country's English-language press.

Findings of this study lend serious doubt to the justification for a hypothesis that English-language papers in India with opposing political ideologies produce substantive differences in framing of environmental news. Therefore, it provides evidence that hegemony theory does not fully explain the Indian press experience as it pertains to coverage of the environment, at least among the English-language national press. Given the homogeneity of results between papers, it was useful to unearth the primary constraints affecting press performance and framing of news.[46]

In determining what factors do play a role in influencing news production in India, the study found that the intra-organizational cultural level was most important in constraining environmental reporting in India, followed by factors on the extra-organizational political level. These levels subsumed the extra-organizational cultural level, which was the next most important. Less critical in framing of Indian environmental news were the intra-organizational political level and, interestingly, given the importance of financial concerns in developing countries, the intra- and extra-organizational economic levels, which were found to exert an equal strength of influence upon framing.

Hypotheses could be generated from these findings. For instance: (H1) More than any other factors constraining India's English-language dailies, newsroom cultural values (an intra-organizational cultural factor) predict the framing of environmental news. (H2) Advertiser pressure (an extra-organizational economic factor) is more likely to predict framing of environmental news in local-language papers in India than in the Indian English-language press. Many more hypotheses of this kind could be developed and tested in the future.

Various internal and external political, economic and cultural factors were said to bias Indian news coverage toward an environmental sustainability perspective in some cases, according to the interviews with the Indian journalists. Other factors, they said, led to over-simplification and sensationalizing of environmental issues. To explain the portrayal of the environment in the news, journalists repeatedly referred to the four over-riding themes (mentioned previously) that they felt tended to constrain coverage of the environment in India. These included: A) Objectivity versus Advocacy; B) Democracy and India's Free Press; C) Market Journalism; and D) Cultural Resonance. These factors manifested in the day-to-day activities of the Indian press in a number of ways that can be compared to those faced by environmental journalists in the U.S. Two aspects of the findings should be discussed in greater depth. The intra-organizational level (of professional norms, routines and gatekeeper bias) is important since it was found to exert the most influence on reporters' activities. Also examination of the

---

[46] Future studies should compare national and regional papers within India or national papers between countries, which would likely provide greater variance.

particular professional norm of objectivity versus advocacy journalism, which is a factor within the intra-organizational level, helps to clarify discussions of the environmental sustainability/economic development debate as it plays out in the Indian press.

Environmental journalism in the West is held up to a professional norm of objectivity in which credibility of reports must be rigorously maintained, letting the audience "come to its own conclusions."[47] One stereotype of news coverage in developing countries has been that objectivity is often lacking. However, this study found that in India this assessment does not explain the case.

Evidence suggests that the professional norm of objectivity was neither entirely rejected nor embraced in India but rather fell into a gray area, as is sometimes the case in the U.S. as well. For instance, Rogers describes the prototypical "good science story" saying that the journalistic tradition in the U.S. is to seek after truth and fairness by using a two-handed approach: balancing information "'on the one hand' with information 'on the other hand'."[48] Yet, as stated before, Gans found that achieving such a standard of total objectivity is rare.[49] Environmental journalists in the U.S. find the problem to be a daily struggle. They say their goal is to be fair and honest, letting the public decide 'truth' for themselves, according the Jim Detjen, president of the International Federation of Environmental Journalists (IFEJ).[50] The issue is rather complex for journalists in general. Johnstone, Slawski and Bowman state that journalists often endorsed a participant role as well as a neutral role toward news production.[51] Based on this research, Weaver and Wilhoit suggest that U.S. journalists do not actually fit into these dichotomous belief systems, but rather, tend to follow one or more of three approaches toward press functions: adversarial, interpretive, and disseminator.[52] Reporters in India said they applied the rules of objectivity, that their stories served an important informational function and they also took sides in certain stories. Thus, just as the Weaver/Wilhoit study found of American journalism, Indian journalists are also extremely pluralistic in their conceptions of media roles.

---

[47] Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time*, 189.

[48] "What Makes a Good Science Story?" Panel discussion with Ira Flatow, Dennis S. O'Leary, Joann E. Rodgers, Stephen H. Schneider, and Robert J. Trotter in *Scientists and Journalists: Reporting Science as News*, eds. Sharon M. Friedman, Sharon Dunwoody and Carol L. Rogers (NY: The Free Press, 1986), 107.

[49] Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek and Time* .

[50] Jim Detjen, personal communication, 5 March 1997.

[51] John Johnstone, Edward Slawski, and William Bowman, *The News People*, (Urbana: University of Illinois Press, 1976).

[52] David H. Weaver and G. Cleveland Wilhoit, *The American Journalist: A Portrait of U.S. News People and their Work* (Bloomington: Indiana University Press, 1986). They assert that the dominant professional role is interpretive, followed closely by the disseminator orientation. In their study, a third of the time these roles were followed in tandem. The adversarial role was rated to be the least important.

Participants in the study viewed environmental advocacy journalism as a norm of the profession. All characterized themselves as advocates for the environment, as well as "development writers," and were forthright in their criticism of the Narmada Dam project organizers, although some expressed the view that both sides might consider a compromise at some point. In the case of news on the Narmada, reporters showed great support in covering the issue, and thus overcoming the limits imposed by gatekeepers in the culture of the newsroom. They often had to fight for space to present the issue, and despite enormous criticism that compromised the credibility of their reputations, fight they did. Some journalists spent their own salaries in order to cover the issue on location in its rural setting, instead of relying on the plethora of press releases received in the city newsroom regarding the project.

In describing coverage of the dam, journalists said they expressed their views by demonstrating a certain tone in their writing. The style of writing likely found precedence in the country's socio-historical context. For instance, although the principle of objectivity was inherited from a press system borne under British rule, Indian newspapers played a seminal role in the country's nationalist struggle and were not afraid to take a stand in their reports, voicing criticism of colonial domination. Likewise, in a shift from the days when "development journalism" was expected to fully support government policies,[53] journalists today regularly question the validity of government-funded industrial development projects, expressing their dissent either openly or in more subtle ways in the news. Thus the historically-rooted advocacy norm elicited a certain bias in the text. For example, in editorials (which by nature are opinionated) editors wrote about their dissent to the project. This was also the case on any feature-style stories (literally in features and hard/news features, as operationalized in the study). This lent credibility to the paper since it could be viewed as objective by Indian journalists' standards – it was free of government pressure. Loaded words, phrases or metaphors portrayed a judgmental attitude toward governmental supporters of the dam. Editorials registered their mistrust of project promoters, such as the World Bank, questioning the overall legitimacy of government or foreign-imposed development. Foremost was the viewpoint that modernization would decimate India's cultural integrity by destroying tribal village practices. Those practices were said to show a commitment to land preservation, without which India would not survive. In total, the tone of Narmada editorials was unequivocally against the Narmada development in India or this type of top-down macro-development projects within the developing world in general, because the costs outweighed the benefits. This showed that the principle of sustainability, as operationalized within this research, prevailed in this form of the text on Narmada coverage.

Beat reporting played a role in shaping coverage. Overcoming pressure to parrot publisher support of governmental policies may have only been possible by the most veteran reporters, as Breed found with U.S. journalists, since experienced newspeople are experts at using their knowledge to subvert policy.[54] As is the norm, old-time staffers were the ones typically writing

111

BEST COPY AVAILABLE

editorials. This bias filtered into general stories as well. Thus, the study showed that despite enormous pressure to conform to the enforced objectivity standards within the journalistic profession in India, it was found that, in general, an environmental ethic was supported in the framing of themes in coverage on the dam. This was reflected in the dominance of environmental sustainability themes used in stories in both newspapers under study. These themes were overwhelmingly focused on the anti-dam aspects of the story, such as the negative impacts of the project and anti-dam protests.

Some journalists felt the objectivity argument was later used to manipulate coverage to be more in favor of the project when in fact it was gatekeeper bias that played a stronger role. For instance, at The Times of India, the paper's owners received a lot of pressure from pro-dam business interests to avoid coverage of the dam altogether, or to present it in a positive light. Thus, despite the environmental advocacy of reporters at the paper, this pressure may have managed to filter into the most overt aspect of coverage — headlines, which were written by editors closely linked to management. The study found that The Times of India used more pro-dam headlines than the Indian Express.

Journalists had described themselves as objective as well as advocating for the environment. Therefore it was not surprising that stories used an approximately equal number of pro- and anti-dam sources. However, routines may have also been a factor in creating a balance of source use as well. As Coulson and Lacy found in their study of economic news of motor vehicle emission standards in U.S. newspapers, specialty reporters tend to provide more balanced coverage than general assignment reporters.[55] Thus, those with more experience covering environmental and scientific issues tended to be more balanced in their reporting. In the case of India, those interviewed considered themselves environmental reporters, although they also carried the burden of covering other beats, especially when the legislature was in session in government. Beat reporting routinizes news gathering and helps journalists to cultivate a greater variety of sources than those covering an issue for the first time. This may have contributed to a balancing of claimsmakers in Narmada news.

The characterization of environmental reporters in India becomes important when trying to establish how debates over the environment are portrayed. Indian reporters from the English-language press felt the media play an important role in national development, saying their voice is critical in setting governmental policy. To a lesser degree, they felt that they did help to educate the public, although the local-language press was seen to have an overall greater impact on India's general public. Reporters said the national press was viewed as more objective than local newspapers because it was less open to the forces of corruption, an issue considered of great importance in India.

In short, the study found that the intra-organizational cultural factor of professional norms toward objectivity versus advocacy led to an environmental bias in terms of tone of coverage and themes. The intra-organizational cultural factor of gatekeeper bias constrained the framing of headlines in papers while objectivity norms and routines regarding beat specialization helped to balance the use of sources.

---

[55] David C. Coulson and Stephen Lacy, "Newspaper Economic Coverage of Motor Vehicle Standards" (Paper presented at the AEJMC, Chicago, August 1997).

By examining environmental reporting in India, this study expanded Friedman and Friedman's assertion on environmental news production in Asia: that the socio-historical context there encompasses a complexity of political, economic and cultural constraints.[56] Likewise, it found agreement for Friedman's statement that environmental reporting around the world is no easy task. Thus, charges of sensationalism, oversimplification and bias of environmental news must be grounded in consideration for the constraints affecting press performance.[57] This research shows that the model of hierarchy of levels of influence also applies within a Third World context, wherein the micro-level was the most dominant in predicting framing.[58] The following figure and model illustrate the influences upon environmental reporting in India.

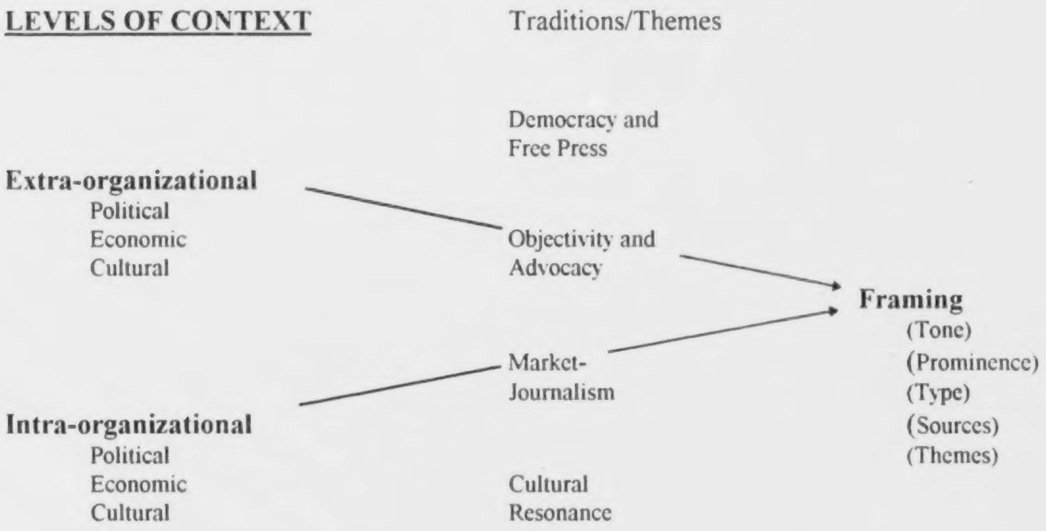
---

[56] S. M. Friedman and K. A. Friedman, "Environmental Journalism: Guardian of the Asian Commons," 7-37.

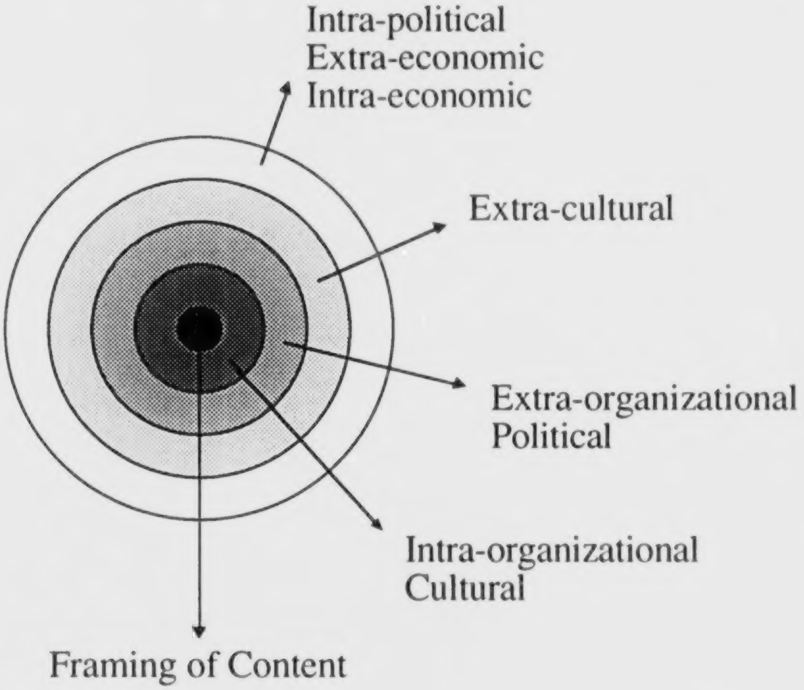
[57] Friedman, "Environmental Reporting: Problem Child of the Media," *Environment* 25, no. 10 (1983): 24-29.

[58] Constraints will likely vary based upon geographic location and environmental controversy.

FIGURE 3
Contextual Forces and Framing
on The Times of India versus Indian Express
on Environmental Journalism in India



Hierarchy of Intra- and Extra-organizational Influences on Environmental News Content in the Indian English Language Press



Conclusion:

A complex combination of intra- and extra-organizational contextual factors constrained press performance in India; thus construction of the environmental sustainability and economic development debate was mediated by a multiplicity of factors on different levels. Political, economic and cultural constraints upon two of the country's leading English-language newspapers were found to be similar, except for political ideology (an intra-organizational factor) and perceived target audience (an extra-organizational cultural factor).

Despite the opposing political ideologies of the newspapers under study, both portrayed the Narmada Dam controversy similarly, except in the case of headlines: (The Times of India tended to support the dam, while the Indian Express opposed it). Differences in internal political, and external cultural factors help to explain the variation found between the two papers on this variable. Based on this one difference, however, it cannot be said that all pro-government papers in India will necessarily support economic development while all anti-government papers support environmental sustainability. It is likely that because of the overwhelming similarities in contextual forces constraining the national press in India, framing of the sustainability/development debate was found to be somewhat uniform between Indian national newspapers, with the sustainability paradigm legitimized in the press to a certain degree.

APPENDIX A – TABLES

TABLE 1

Topic - Headlines Pro or Anti-Dam By Combined Categories

Topic	"Progov" Newspaper	"Antigov" Newspaper	
Headline- Pro-dam & Condition	60 54.1%	30 42.8%	90 49.7%
Headline- Anti-dam	51 45.9%	40 57.1%	91 50.3%
	111 61.3%	70 38.7%	181 100%

Phi = .11, Cramer's V = .11

TABLE 2

Focus on Stars - Headlines Pro or Anti-Dam Broken Down By Category

FocusStars	"Progov" Newspaper	"Antigov" Newspaper	
Headline- Anti-dam	22 18.3%	21 28.4%	43 22.2%
Headline- Pro-dam	11 9.2%	3 4.1%	14 7.2%
Headline- No Stars	87 72.5%	50 67.6%	137 70.6%
	120 61.9%	74 38.1%	194 100%

Phi = .14, Cramer's V = .14

TABLE 3
Editorial Bias - Pro or Anti-dam

Bias	"Progov" Newspaper	"Antigov" Newspaper	
Anti-dam	7 5.8%	6 8.1%	13 6.7%
Not Apply	113 94.2%	68 91.9%	181 93.3%
	120 61.9%	74 38.1%	194 100%

Phi = .06, Cramer's V = .06

TABLE 4
Sources - Pro or Anti-Dam By Combined Categories

Sources	"Progov" Newspaper	"Antigov" Newspaper	
Pro-dam	204 52.2%	125 49.6%	329 51.2%
Anti-dam	187 47.8%	127 50.4%	314 48.8%
	391 60.8%	252 39.2%	643 100%

Phi = .03, Cramer's V = .03

TABLE 5
Sources - Pro or Anti-Dam Broken Down By Category

Source #s	"Progov"	"Antigov"
Indian Gov (Pro)	119/22.4%	73/21.8%
Industry (Pro)	38/7.5%	14/4.2%
Pro-dam NGOs	47/8.8%	38/11.3%
Foreign Gov (Neut)	34/6.4%	25/7.5%
Educat. Experts (N)	29/5.5%	21/6.3%
Courts (N)	23/4.3%	5/1.5%
Villagers (Anti)	88/16.6%	64/19%
Anti-dam NGOs	99/18.6%	63/18.8%
Other	47/8.4%	28/8.4%
Unidentified	8/1.5%	4/1.2%
	532	335

TABLE 6
Theme - Environmental Sustainability Vs. Economic Development
By Combined Categories

Themes	"Progov" Newspaper	"Antigov" Newspaper	
Environ. Sustain.	99 83.9%	59 85.5%	158 84.5%
Econ. Develop.	19 16.1%	10 14.5%	29 15.5%
	118 63.1%	69 36.8%	187 100%

Phi = .02, Cramer's V = .02

TABLE 7
Theme - Environmental Sustainability Vs. Economic Development
Broken Down By Category

Themes	"Progov"	"Antigov"	
(ES)			
H/E Impact	31/26%	12/16%	43/22.2%
Project Review	22/18%	13/17%	35/18%
Mistrust Project	8/6%	4/5%	12/6.2%
Top Down Devel.	2/2%	2/3%	4/2.1%
Protest	36/30%	28/38%	64/33%
(ED)			
Mac-dam Devel.	6/5%	2/3%	8/4.1%
Height Compromise	1/1%	1/1%	2/1%
Finance	10/8%	5/7%	15/7.7%
Mistrust Anti-dam	2/2%	2/3%	4/2.1%
Other	2/2%	5/7%	7/3.6%
	120	74	194
	61.9%	38.1%	100%

TABLE 8
Type - Episodic or Thematic News By Combined Categories

Type	"Progov" Newspaper	"Antigov" Newspaper	
Episodic (Hard News)	95 79.8%	61 82.4%	156 80.8%
Thematic	24 20.2%	13 17.6%	38 19.7%
	119	74	193
	61.7%	38.3%	100%

Phi = .03, Cramer's V = .03

THE SOURCES IOWANS TRUST:
THE IMPACT OF INVOLVEMENT ON CREDIBILITY PERCEPTIONS AND CHANNELS USED FOR ENVIRONMENTAL ISSUES

Sunae Jo and Lulu Rodriguez

Paper presented to the
Science Communication Interest Group
Association for Education in Journalism and Mass Communication
Annual Convention, August 4-7, 1999
New Orleans, LA

Sunae Jo is graduate student and Lulu Rodriguez is assistant professor
in the Greenlee School of Journalism and Communication
at Iowa State University, 114 Hamilton Hall, Ames, IA 50011-1180
Tel.: 515-294-0484; Fax: 515-294-5108; email: lulurod@iastate.edu
URL: http://www1.iastate.edu/~jlmc/
Please address all inquiries to the second author.

THE SOURCES IOWANS TRUST: THE IMPACT OF INVOLVEMENT ON CREDIBILITY PERCEPTIONS AND CHANNELS USED FOR ENVIRONMENTAL ISSUES

Sunae Jo and Lulu Rodriguez

Abstract

Audience's perceptions of credibility in this study was treated not as an attribute of sources but as a relational concept, dependent upon a receiver's involvement with the message. The results show that receivers' self reported involvement with environmental issues could predict their perceptions of source credibility and the extent of their information-seeking behavior. However, involvement did not predict the choice of interpersonal channels as the preferred source of environmental information.

THE SOURCES IOWANS TRUST:
THE IMPACT OF INVOLVEMENT ON CREDIBILITY PERCEPTIONS AND CHANNELS USED FOR ENVIRONMENTAL ISSUES

Statement of the Problem

The effectiveness of communication is commonly assumed to depend to a considerable extent upon who delivers it (i.e., Hovland, et al., 1953). While substantial research has been done on the characteristics of a credible communication source, whom to trust regarding environmental issues is anecdotal and nebulous. Indeed, mass media and interpersonal communication channels have always been pitted against each other in terms of effect and efficiency.

Policy makers, public relations practitioners and public information campaigners working on environmental issues have often tapped government officials and scientists as primary sources because of a long-standing belief on these sources' credibility (Anderson, 1991). On the other hand, Mauss (1975) suggests that the contribution of the mass media to environmental awareness, conservation and preservation cannot be discounted. Most environmental information, he claims, comes from the mass media and that the mass media are very influential in shaping the public's attitudes on and behavior toward environmental issues.

In Iowa where a cursory content analysis of mass media reporting within the past three years easily reveals that the environment is a topic that has dominated and will continue to dominate media agenda, it is therefore pertinent to ask who or what information channels do people trust to help them make enlightened environmental decisions?

What factors have a bearing on credibility perceptions? Early research (i.e., Berlo, et al., 1969) suggests that credibility is an attribute of the source. But Gunther (1988) suggests that the receiver's relationship to the content of a message will affect credibility attributed to the source. Therefore, source credibility is not an absolute but a relational concept.

For example, in a study of what information sources people use most for environmental information, Murch (1971) found that the mass media clearly dominated the list. However, studies of select samples of environmental activists show quite different uses of information sources. For example, Sellers (1973) found that environmental activists—high involvement users of environmental information—turn primarily to interpersonal sources for information on environmental issues, and not to the mass media. Atwater et al. (1985) also found that the media's impact was lesser for those individuals who were more engaged in interpersonal communication regarding environmental issues. Clearly, differences in receivers' involvement toward a message affect their perception of a source's credibility. This, in turn, leads to different preferences in information sources.

This study is an attempt to explore aspects of the relationship between information source use and perceived source credibility by individuals who have different levels of involvement toward environmental issues. The results of this study will be useful to policy makers, public relations practitioners, and public information campaigners because by selecting the right information sources to disseminate their messages to target audiences, public and private investments in information campaigns can be put to their best use.

Literature Review

Source Credibility

Ever since Hovland and Weiss's (1951) classic experiment, researchers have reported that the greater the perceived credibility of a source of communication, the greater the effectiveness or persuasiveness of the message.

Several researchers have concluded that credibility is a multidimensional concept, such as "safety," "qualification," "dynamism," "knowledgeability," "accuracy," "fairness," and "completeness," although the dimensions identified vary from study to study. For example, the work of Andersen and Clevenger (1963), Bandhuim and Davis (1972), Berlo, Lemert, and Mertz (1969), Bowers and Phillips (1967), Falcione (1974), Markham (1968), and McCroskey (1966) have made contributions to the understanding of the multidimensionality of the credibility concept.

Hovland, Janis, and Kelly (1953) suggest that credibility depends on two factors: expertise ascribed to the source by the receiver, and the trustworthiness the receiver ascribes to the source. McGinnin and Ward (1974) reported that sources of communication identified as both expert and trustworthy produced more change in attitude in the desired direction than sources lacking such attributes. Sternthal, Dholakia, and Leavitt (1978) found that persuasion based on communication is related to cognitive evaluations of credibility of the source and the recipient's initial position or opinion concerning an issue.

Political campaigners often strive to enhance their credibility to improve the acceptance of their messages. There were comprehensive research work of positive relationships between credibility and attitude change. Research has consistently shown that the more overall credibility a communicator is perceived as having, the more likely the receiver is to believe the transmitted information, with persuasion a more likely result (O'Keefe, 1990; Eagly and Chaiken, 1993). Hovland et al.'s study (1953) indicate that the very same information presentation tend to be judged more favorably when made by a communicator of high credibility than by one of low credibility.

As can be seen, credibility consists of at least three important factors: source, message, and receiver. Source credibility is therefore not an absolute concept; all is dependent on from what perspective the receiver is viewing the source. Therefore, it is important to find out what factors are important to establish credibility and how credible communicators are to a given audience.

Source Credibility and Involvement

One factor linked to source credibility and persuasive impact is a person's involvement with the issue (Petty and Cacioppo, 1986). Gunther (1990) has argued that media credibility is more a function of involvement in the issues being portrayed than of characteristics of the media, or of audience demographics or general psychological dispositions.

Involvement has been defined by such diverse terms as interest, importance, connections to one's life, commitment, relevance, issue salience, and attention or motivation. Freedman (1964) defines involvement as "commitment to a position or concern with a specific stand on an issue", whereas Festinger (1957) defines involvement as "concern with the issue itself".

The concept of involvement is rooted in "self-concept," which is described in the works of Freud (1960) and George Mead (1934). Self-concept later served as the foundation of research on "ego-involvement." Sherif et al. (1965) conceptually defined ego-involvement as the arousal of the individual's commitment or stand, in the context of appropriate situations. Ego-involvement is determined by the subject's stand on an issue and by the position advocated in communication between the issue and an individual (Rhine & Severance, 1970). When ego-involved attitudes are aroused, an individual becomes "involved," and discrimination, judgment, perception, memory, thought, and explicit behavior are modified or altered (Salmon, 1986).

Petty and Cacioppo (1986) proposed that when an issue is personally involving or relevant, people will be more motivated to think about the information provided by a high than by a low credible source. As an issue increases in importance, people have a greater concern to seek correct information or opinions, and information from an expert is more likely to yield a correct opinion than from a non-expert.

Gunther (1988) has supported that people who are highly involved with an issue are also likely to have a more fixed or firmly held position on the issue, a more polarized position on the issue, more prior knowledge about the issue, more self-perceived expertise on the issue, more experience with thinking, discussing, or arguing about the issue, and more intense personal interest in the issue. For these reasons, highly involved people have the ability and motivation to undertake what Petty and Cacioppo call "biased processing." Prior opinion steers their perceptions and processing of the message in such a way as to maintain the original opinion (Ross, Lepper, and Hubbard, 1975). That is, people expose themselves to communication selectively.

Involvement and Information Sources

The notion of selectivity is central to an understanding of the role of information sources in communication. Comparisons between interpersonal and mass media sources have been made in terms of relative influence—which information sources have been more effective or which have the greater potential for influence (Chaffee & Mutz, 1988).

Uses and gratifications theory is focused on explaining how audience activity and media behaviors interact. Blumler (1979) suggested that audience activity describes how intentionally and purposely people select, attend to, and use media and their content. Levy (1987) focused on two types of audience activity, selectivity (defined as how purposely people chose media and their content) and involvement (the degree to which people personally relate to media content). He found that the more audience members were motivated in their use of and the more they perceived various types of gratification, the more active they were in their media use. Involvement determines whether the audience is active or passive and determines how much the audience is active in their media use. It assumes that with high involvement, people become more active users of relevant information.

Grunig (1980) supports the contention that high involvement situations are likely to lead people to actively engage in information seeking behavior. He makes a difference between consummatory use of information (for pleasure or curiosity) and instrumental use of information (for solving a problem or dealing with a practical situation) which are related to involvement. Consummatory communication occurs in low involvement situations. In this case, people passively process information but do not actively seek it. Instrumental communication occurs when the personal relevance of the issue in question is high. In this case, people seek out information from the mass media and other sources to solve a problem or deal with a practical situation. Thus, information seeking occurs when the perceived level of involvement is high.

Grunig (1980) also predicts that during instrumental communication, people are more likely to utilize interpersonal communication sources or specialized media such as booklets, magazines, and seminars, while during consummatory communication, people are more likely to use the more passive mass media sources.

Environmental Information and Information Sources

Research results on public opinion and attitudes on environmental issues (i.e. Murch, 1971; Trop and Roos, 1971;Van Liere and Dunlap, 1980) suggest that public awareness and concern about the environment developed during the 1960s and then underwent considerable 'ups' and 'downs' in the media and public agenda over the last 25 to 30 years.

Generally, heavy coverage of an issue in the mass media should also result in a high public impact (Mazur, 1989). It is assumed that if the media provide high coverage of a specific environmental issue, this should lead to an increased public awareness and concern for that issue. In the case of environmental issues, the empirical evidence for these correlation is not

130

convincing. For example, Atwater et al. (1985) found weak, but positive, correlation between the prominence in the media of six environmental issues and the relative importance assigned to those issues by the public. Protess et al. (1987) found little evidence of mass media agenda-setting effects of toxic waste coverage on public opinion. Anderson (1991) pointed out that media tend to focus on "short, sharp, highly visible events," because these are easy to report on. He also indicated that the media usually respond to environmental issues after public awareness has already been initiated.

Personal experience, interpersonal interaction and exchanges of information concerning environmental problems are also instrumental in the formulation of views and attitudes, and as Ball-Rokeach and DeFleur (1982) have pointed out in their 'media-dependency' hypothesis, the role of the media will vary form issue to issue, depending on the public's dependency on the media as a source of information.

Evidence exists to support the contention that interpersonal communication plays as much or more of a role than the media in influencing people's perception of environmental issues. For example, Atwater et al. (1985) found that the media have a moderate ability to influence the public agenda for environmental issues. They also observed that the media's impact was lesser for those individuals who were more engaged in interpersonal communication regarding environmental issues.

Grunig (1983) predicts that people who are highly involved with an environmental issue are more likely to utilize interpersonal communication sources. Because the homophilous nature (more like oneself) of interpersonal contacts increases the degree of credibility the receiver attributes to a source

(Chaffee, 1982). Diffusion theory (Rogers, 1995) also shows that some people (the innovators and early adopters) who most involved in an issue seek information from interpersonal sources before adopting the new idea. Gunther (1988) also found that as people's attitudes on a number of issues were more polarized, their trust in mass media's coverage of those issues declined. He said that those most involved in an issue, demonstrated by their highly partisan or polarized attitudes, were also most skeptical of mass media.

Hypotheses

Based on the forgoing literature, the following research questions and hypotheses are posed:

Research Question 1: What communication channels do people depend on for information about environmental issues?

Research Question 2: What do people in general consider as more credible sources of information issues, mass media or interpersonal sources?

Hypothesis 1: There is a positive relationship between credibility perceptions and information source use. That is, if people perceive the mass media as more credible than interpersonal sources, then they will depend more on mass media sources for their information about environmental issues.

Hypothesis 2: People who are highly involved in environmental issues will give a high credibility score to interpersonal sources. This is following the axiom of diffusion theory which states, that those most involved in an issue will seek information from interpersonal sources because source-receiver similarity or homophily increases the degree of credibility the receiver attributes to a source.

Hypothesis 3: People who are highly involved in environmental issues will actively seek different information sources to keep up with developments concerning the environment. This is based on Katz et al.'s uses and gratifications theory which suggests that normative influences based on an individual's perception of his or her social role will force him or her to seek gratification (in this case, awareness) and orientation from all possible information sources.

Hypothesis 4: People who are highly involved in environmental issues are more likely to utilize interpersonal communication sources. This is based on Grunig's situational theory which suggests that interpersonal contacts are more effective sources for people highly involved in environmental issues.

Methodology

Method of Data Collection

To gather data for this study, a one-shot baseline statewide random population survey was conducted in conjunction with a public information campaign that aims to increase the visibility of the Resource Enhancement and Protection (REAP) program of the Iowa Conservation Education Board.

The respondents for this study were drawn by accessing data collected from white page telephone directories all over Iowa and supplemented with auto registration information from counties that release this data. Systematically nth-selected from the database which is sorted by county and ZIP code, the respondents were randomly chosen across the entire state. Recognizing that the REAP campaign will be a statewide effort, no attempt was made to specify areas by any segmentation factor. To maintain the representativeness of the sample, probability methods were also applied to the selection of respondents within a given household. The addressees were specifically given instructions as to the other likely person to answer the questionnaire should they find themselves in a difficult position to complete the survey. The population under study includes all adults 18 years of age and over. If there were several eligible household members, the addressee was asked to select the adult whose birthday comes closest to August 15.

The questionnaire was mailed in October 1995 to 1,150 respondents, with follow-up letters sent to non-respondents six weeks later. Postcards were also sent to non-respondents to encourage their participation in the study. The response rate was 40% after second wave mailing.

Operational Definition of Variables

The **information sources** people depend on for environmental issues were divided into **mass media** (newspapers, television, magazines, and radio) and **interpersonal sources** (family members, friends and neighbors, Iowa State extension workers, representatives of private businesses or organizations, universities, colleges, schools and other government agencies). Respondents were asked to indicate their preferred source of environmental information by marking the first source with a "1", marking the second choice with a "2", and so on until all sources were ranked.

Respondents' mass media use and interpersonal contacts were measured to find out their **active communication behavior**. Respondents were asked how likely they are to attend to environmentally relevant mass media messages and how closely they use the media. Use of four different **mass media**-- newspaper, television, magazine, and radio--were measured by asking; "During the past seven days, how often have you used each of the four media to get information about the environment and natural resources." Respondents answered by indicating "hardly ever", "once in a while", "somewhat often", "often", and "every day." Respondents were asked how often they talk to friends and acquaintances about politics to measure indirectly their **interpersonal sources use**.

Source credibility was measured using two indicators: trustworthiness and expertise (Hovland et al., 1953). To measure trustworthiness, respondents were asked to indicate how believable they personally find each source regarding environmental issues, on a scale of 1 to 5 where 1 is "not at all believable" and 5 is "extremely believable". Source expertise was measured by asking how expert they personally find each information source in the sense that they really know what they are talking about regarding environmental issues. Answers were given on a scale of 1 to 5 where 1 is "no expertise whatsoever" and 5 is "very knowledgeable".

Involvement was measured by asking respondents to report, using a scale from 1 to 7 where 1 means "do not identify at all" and 7 means "strongly identify with", how much they identify themselves with the label "environmentalist".

Results

The "Environmentalist" Label

To measure the respondents' involvement with the environmental issue, they were asked to rate the degree to which they identify with the term "environmentalist" on a seven-point Likert scale, where 1 means "do not identify at all" and 7 means "strongly identify with." Based on a mean value of 4.4 and valid percentages, respondents were divided into three groups. Those who rated themselves from 1 through 3 in the environmentalist scale were assigned to "low"; those who answered 4 and 5 were considered "medium"; and those who gave answers of 6 and 7 were assigned to "high" involvement category. Following this categorization scheme, the majority of the respondents (61%) fell in the medium involvement category, and the rest divided evenly into high (21%) and low (19%) involvement groups.

A regression test between the respondents' self perception on the environmentalist scale and their attitude toward the environment was conducted to cross-validate their responses to the "environmentalist" scale and to bolster internal validity. The respondents' attitude toward the environment was measured by asking them to report, on a scale of 1 to 5 where 1 is "strongly disagree" and 5 is "strongly agree", where they position themselves on each of seven statements which people make when discussing the environment. The result indicates that the respondents' identification with the environmentalist label has a significant linear relationship with their attitude toward the environment (F=37.12, prob.= .000). One can therefore say that the environmentalist label is a valid measure of overall attitude about the environment.

Demographic differences among involvement groups

A chi-square and ANOVA values were used to determine whether significant demographic differences existed in the comparisons between three different involvement groups (high, medium, and low).

The results in Tables 1 and Table 2 indicate that there is no pattern of relationship between groups in terms of demographic factors. These suggest that respondents' demographic variables do not predict their involvement with environmental issues. Table 2 shows that there are significant differences between involvement groups in terms of years of farming and number of persons at home below 18.

Table 1. Chi-square comparisons on demographic variables among involvement groups

Demographic variable	Chi-square value	DF	P-value
Educational level	12.05	14	0.62
Income	13.62	16	0.63
Occupational status	21.31	14	0.09
Gender	3.03	2	0.22
Race	10.48	10	0.39

Table 2. ANOVA results testing the impact of selected demographic variables on environmental involvement

Demographic variable	F-value	DF	P-value
Age	2.62	2	0.07
Number of persons at home below 18	3.63	2	0.03*
Years of farming	3.23	2	0.04*

$^*p \leq 0.05$

Hypotheses Testing

Research Question 1: What communication channels do people depend on for information about environmental issues?

The respondents reported that they rely on different sources for their information about the environment. Forty four percent ranked newspapers as their number one information source on environmental issues. Overall, mass media channels (newspapers, TV, magazines, radio) are more preferred sources than interpersonal channels (friends, family members, government agencies, extension, private businesses, and universities). Table 3 shows the percent of respondents rating the channel as the first preferred source.

Table 3. Preferred sources of environmental information

Information source	Percent of respondents rating the source as no. 1
Newspapers	44.4
Television	28.0
Magazines	10.3
Radio	7.9
Family members	4.8
Friends	2.6
Private businesses	3.1
Universities	3.1
ISU Extension	1.8
Government agencies	3.2

Research Question 2: What do people in general consider as more credible sources of information on environmental issues, mass media or interpersonal sources?

Respondents were asked to rate the degree to which they perceive each channel as expert and trustworthy on a 5-point scale to measure the credibility of information sources. Scores on these two variables, expertise and trustworthiness, were added and averaged as a measure of the degree of credibility. Scientists, extension workers, universities, friends, government agencies, and businesses were assigned to interpersonal sources; magazines, newspaper, radio and TV were categorized as mass media sources. Credibility scores were computed for each channel and for each of the two major categories of mass media and interpersonal sources.

Table 4 shows the mean score of each information source on credibility. The results indicate that interpersonal sources (X=3.28) are more credible than mass media sources (X=3.06). Specifically, interpersonal sources such as scientists, extension workers and universities, all working within the academic realm, were rated as the most credible interpersonal communication sources. Businesses received the lowest ratings. Mass media sources were given moderate credibility estimates.

Table 4. Credibility assessment by channel or source

Information source	N	Mean [1]	Std. Deviation
Interpersonal sources	391	3.28	0.61
Scientists	375	3.80	0.95
Extension workers	362	3.74	0.87
Universities	371	3.63	0.89
Friends	384	2.89	0.84
Government	372	2.83	0.97
Businesses	373	2.81	0.90
Mass media sources	395	3.06	0.74
Magazines	389	3.33	0.33
Newspaper	395	3.01	0.86
Radio	381	2.98	0.89
Television	394	2.89	0.93

[1] A higher mean indicates greater credibility estimates.

Among all four mass media sources, magazines were ranked as the most credible, indicating the primacy of the print media as a source of environmental news.

Hypothesis 1: There is a positive relationship between credibility perceptions and information source use.

A chi-square test was performed to find out the relationship between perceptions of credibility (Research Question 2) and information source use (Research Question 1). Hypothesis 1 assumed that if people perceive the mass media as more credible than interpersonal sources, then people will most likely depend on the mass media rather than interpersonal sources for information regarding environmental issues.

To test Hypothesis 1, respondents were asked to indicate their preferred source of environmental information by marking the first source with a "1". If respondents rated the mass media (newspapers, TV, radio, and magazines) as their number one information source on environmental issues, the mass media were regarded as their preferred information source. The credibility scores computed for each mass medium and interpersonal source (Table 4) were compared to measure receivers' credibility perceptions.

The significant p-value (0.018; Chi-square=5.58) in the results shows that there is a tendency for people who perceive mass media as more credible to show greater preference for mass media use. This suggests that the respondents' perceived credibility perceptions can predict their preferred information source. Therefore, Hypothesis 1 is supported.

Hypothesis 2: People who are highly involved in environmental issues will give high credibility scores to interpersonal sources.

A regression test was performed to determine whether the respondents' perceived involvement with the environment leads to a different credibility score for the information sources. Following diffusion theory, this hypothesis assumes that highly involved respondents will give higher credibility scores to interpersonal sources than those who are in the low involvement situation because those most involved in an issue are likely to be more skeptical of mass media and friendly to interpersonal sources. This means that there is a connection between an individual's personal stake in an issue and credibility judgments for interpersonal sources.

The results indicate that the respondents' perceived involvement with environmental issues varies directly with the credibility score people give to interpersonal sources (F=3.98; prob.=.001). Specifically, greater involvement leads to greater perceived credibility for interpersonal communication sources. Thus, Hypothesis 2 is also supported.

Hypothesis 3: People who are highly involved in environmental issues will actively seek different information sources to keep up with developments concerning the environment.

A regression analysis was conducted to test whether greater involvement with environmental issues leads to more active information seeking by the respondents. This hypothesis assumes that if people are highly involved in environmental issues, they will be more active users of information sources—mass media and interpersonal—than those in the low-involvement situation.

To measure their information seeking behavior, the respondents were asked how often they use the mass media (newspapers, TV, radio, and magazines) to get information about the environment and natural resources and how often they talk to friends and acquaintances (interpersonal sources) about politics. These were summed and averaged to form a communication behavior index.

The results indicate that respondents' perceived involvement with environmental issues significantly predicts their information seeking behavior (F=14.26; prob.=.000). This suggests that greater involvement leads to more active use of information sources, both interpersonal and mediated. Hypothesis 3 is, therefore, supported.

Hypothesis 4: People who are highly involved in environmental issues are more likely to utilize interpersonal communication sources.

A chi-square test was performed to test if there is a relationship between respondents' perceived involvement in environmental issues and their interpersonal communication source use. This hypothesis assumes that people who are highly involved in environmental issues would differ from those in the low involvement category on the sources of environmental information they cite as number one.

The results show that there is no significant relationship between these two variables (chi-square=1.69; prob.=.429). The respondents' involvement does not predict their information source use. Based on the results, it cannot be said that people who are highly involved in environmental issues are likely to use interpersonal sources. Therefore, Hypothesis 4 is not supported.

Analysis and Conclusion

Before attempting an analysis of the results, some methodological limitations must first be acknowledged. This study entailed a secondary analysis of previously gathered data. While such an analysis has practical benefits, mainly that it is cheaper and quicker, it has serious limitations. An important one is that analysis is done without knowledge of data limitations and flaws because the secondary analyst is removed from the initial data gathering procedures.

The data in this study were gathered using a self-administered questionnaire in a one-shot statewide survey. A generally lower rate of response for self-administered questionnaires can introduce threats to validity due to the lack of representativeness of the sample. The respondents of this study do not seem to be representative of the general Iowa population. The study's respondents were older, better educated, and had a higher income, compared to those detailed in the1990 Iowa census data. This, therefore, has profound implications for the study's generalizability or external validity.

This study examined the effect of receivers' involvement in environmental issues on their perceptions of their information sources' credibility. Four hundred fifteen respondents returned their questionnaires that formed the basis of analysis. The findings illuminate the impact of involvement on people's environmental communication behavior:

① **The effect of demographic variables.**

First, the study found that demographic variables did not predict Iowans' involvement with environmental issues. The results of a chi-square and an ANOVA test indicate that there are no significant demographic differences among the groups except in terms of years spent farming and the number of persons at home below 18. That structural variables such as education and income do not have a bearing on environmental involvement is a finding that should encourage communication practitioners. It suggests that any audience segmentation strategy will not call for audience differentiation based on demographics.

More years spent farming evidently leads to greater involvement with environmental issues. This may be explained by the fact that most environmental problems faced in Iowa such as soil erosion, livestock wastes, water quality, and agricultural chemical leaks are related to the farm. Thus, personally experienced daily interaction with the environment seems to play an important role in enhancing involvement in it.

Having less persons at home under 18 directly translates to not having children who need to be taken care of. This allows people to turn their concerns to issues other than family matters (such as the environment). This finding also bolsters the results of opinion polls (Dunlap, et al., 1991) which showed that the public's concern about environmental issues is correlated with an improved standard of living which may result from not having too many dependents.

② **Preferred information sources.**

Second, the study found that newspapers (44 %) were the number one sources of environmental information among Iowans. TV (28 %), magazines (10 %), and radio (8 %) followed, in that order. The result seems to indicate that most of the respondents depend heavily upon the mass media for knowledge about the environment.

Newspapers ranked first because they (1) are "readily accessible," (2) "provide thorough, more in-depth coverage," and (3) they are "reliable." This result counters the findings of previous studies. For example, Murch (1971) found that television was the most often cited source regarding environmental issues. Similarly, television was the source used most often to learn about the environment in a random sample of three Detroit communities (Stamm, 1972). This study's results, however, find consonance with a 1987 national newspaper readership study which found that the respondents' age is positively related to newspaper use (Bogart, 1989). This study show that older respondents are spending more time at home and have more time to read the newspapers. Indeed, newspaper readers are growing older. Such is the case in this study where the average age of respondents is 50 years.

③ Source credibility.

Third, the study found that interpersonal sources were rated more credible than the mass media. The results show that among information sources, scientists were rated as the most credible source of environmental information. Readily accessible sources such as newspapers, TV, radio, friends, family members were given moderate credibility scores. However, specialized media such as magazines, universities, and extension workers were given higher credibility ratings. Another finding was that government and businesses received the lowest ratings, suggesting a highly critical-minded respondent group. This may also reflect the farmers' disdain for regulations and dislike for organizations with profit motivations.

④ Credibility and information use.

Fourth, the study found that there was a strong relationship between credibility perceptions and information sources used. The results showed that people are likely to depend on information sources based on their credibility perceptions. Even though the respondents said that the mass media were their major information sources regarding environmental issues, they preferred sources that are more credible to them. The respondents ranked scientists as the most credible source of environmental information. However, information from scientists is mainly distributed through mass media outlets (Durand, et al., 1990) which might explain their mass media preference. This is to say that attitudes toward the information source lead to the actual use of the source. That is, making the source more credible would lead to increased use of that source.

⑤ Involvement and credibility perceptions.

Fifth, the study found that there was a significant relationship between involvement and source credibility perceptions. The results show that greater involvement leads to greater credibility perceptions of mass media and interpersonal sources. The results also show that exposure to information sources do affect credibility perceptions. This means that heavy users of a particular information source are more likely to regard that source as credible than infrequent users. A highly involved person seeks environmental information to be kept well informed and remain involved. The highly involved respondents' heavy exposures to both information sources causes them to rate these sources as more credible, compared to those in the low involvement condition.

However, people who are highly involved in environmental issues gave higher credibility scores to interpersonal sources than to mass media. This result supports the connection between an individual's personal stake in an issue and credibility judgments (Gunther, 1988). Those most involved in an issue were also most skeptical of mass media and gave more credibility to prestigious channels or one's own friendly reference group which are basically interpersonal sources (Sherif, et. al., 1965).

⑥ Involvement and interpersonal source use.

Sixth, the study found that there was no relationship between involvement and interpersonal source use. The finding indicates that involvement did not have a significant effect on interpersonal source use that might seem contrary to diffusion theory. However, greater involvement may not have led to more interpersonal sources use because this study used data gathered at the awareness stage of the REAP program. According to Rogers (1995), at awareness stage, highly involved persons utilize mass media as their major sources of information. Therefore, it is recommended that future research compare the relationship between involvement and information source use at different stages of the adoption process.

In general, the study provided evidence to support the contention that level of involvement is a good predictor of credibility perceptions and environmental communication behaviors.

References

Anderson, A. Source strategies and the communication of environmental affairs. *Media Culture and Society*, 13(4), 459-476, 1991.

Anderson, K. and Clevenger, T. A summary of experimental research in Ethos. *Speech Monographs*, 30, 59-78, 1963.

Atwater, T., Salwen, M. B., and Anderson, R. B. Media agenda-setting with environmental issues. *Journalism Quarterly*, 62(2), 393-397, 1985.

Ball-Rokeach, S. J. and DeFleur, M. *Theories of Mass Communication*. 4th ed., New York: Longman, 1982.

Banduhuim, E. S. and Davis, M. K. Scales for the measurement of Ethos: another attempt. *Speech Monographs*, 39, 296-301, 1972.

Berlo, D. K., Lemert, J. B., and Mertz, R. Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33, 563-576, 1969.

Blumler, J. G. The role of theory in uses and gratifications studies. *Communication Research*, 6, 9-36, 1979.

Bogart, L. *Press and Public: Who reads what, when, where, and why in American newspapers.* Englewood Cliffs, New Jersey: Lawrence Erlbaum Associates, Inc., 1989.

Bowers, J. W. and Phillips, W. A. A note on the generality of source-credibility scales. *Speech Monographs*, 32, 185-186, 1967.

Chaffee, S. H. "Mass Media and Interpersonal Channels: Competitive, Convergent or Complementary?" in G. Gumpert and R. Cathcart (ed), *Inter/Media: Interpersonal Communication in a Media World*, New York: Oxford University Press, 57-77, 1982.

Chaffee, S. H. and Mutz, D. C. Comparing mediated and interpersonal communication data. *Sage annual reviews of communication research*, Vol.16, Beverly Hills: Sage, 19-43, 1988.

Dunlap, R. E. and Scarce, R. "The polls-poll trends: Environmental problems and protection", *Public Opinion Quarterly*, 55:713-734, 1991.

Durand, J., Pages, J., Brenot, J., and Barny M. "Public opinion and conflicts: A theory and system of opinion polls", *International Journal of Public Opinion Research*, 2(1), 30-52, 1990.

Eagly, A. H. and Chaiken, S. *The Psychology of Attitudes*, Orlando, FL: Harcourt Brace, Javanovich, 1992.

Falcione, R. L. The factor structure of source credibility scales for immediate superiors in the organizational context. *Central States Speech Journal*, 25, 63-66, 1974.

Festinger, L. *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson. 1957.

Freedman, J. L. Involvement, discrepancy, and change. *Journal of Abnormal and Social Psychology*, 69, 290-295, 1964.

Freud, S. *The ego and the id.* (Trans. By J. Riviere), New York: Norton Library, 1960.

Grunig, J. E. "Communication of scientific information to nonscientists" In Dervin, B. and M. J. Voigt (eds.), *Progress in Communication Sciences*, Vol. II. Norwood, New Jersey: Ablex Publishing Corp., 167-214, 1980.

Grunig, J. E. Communication behaviors and attitudes of environmental publics: Two studies. *Journalism Monographs,* 81, 1983.

Gunther, A. C. Attitude extremity and trust in media. *Journalism Quarterly,* 65, 279-287, 1988.

Gunther, A. C. *When people trust the news and when they don't: Situational assessments of mass media.* Paper presented at the International Communication Division, 1990.

Hovland, C. I., Janis, I. L., and Keily, H. H. *Communication and Persuasion.* New Haven and London: Yale University Press, 1953.

Hovland, C. I., & Weiss, W. The influence of source credibility on communication effectiveness. *Public Opinion Quarterly,* 15, 635-650, 1951.

Huseman, R. C., Lahiff, J. M., and Hatfield, J. D. Communication Process. In *International Communication in Organizations,* Boston: Holbrook Press Inc., 1976.

Levy, M. R. VCR uses and the concept of audience activity. *Communication Quarterly,* 35, 267-275, 1987.

Markham, D. The dimensions of source credibility of television newscaster. *Journal of communication,* 18. 57-64, 1968.

Mauss, A. *Social Problems as Social Movements.* Philadelphia: J. B. Lippincott, 1975.

Mazur, A. "Communicating risk in the mass media" In D. I. Peck (ed.), *Psychological Effects of Hazardous Toxic Waste Disposal on Communities,* Springfield, IL: Charles C. Thomas, 1989.

McCroskey, J. C. Scales for the measurement of Ethos. *Communication Monographs,* 33. 165-72, 1966.

McGuinnies, E., & Ward, C. D. Persuasibility as a function of source credibility and locus of control: five cross-cultural experiments. *Journal of Personality,* 8, 360-371, 1974.

Mead, G. H. *Mind, Self and Society.* Chicago, IL: University of Chicago Press. 1934.

Murch, A. W. Public concern for environmental pollution. *Public Opinion Quarterly,* 35(1), 102-109, 1971.

O'Keefe, D. J. *Persuasion: Theory and Research,* New York: Sage, 1990.

Petty, R. E., and Cacioppo, J. T. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change.* New York: Springer-Verlag. 1986.

Protess, D.L, Cook, F. L., Curtin, T. R., Gordon, M. T., Leff, D. R., McCombs, M. E., and Miller, P. The impact of investigative reporting on public opinion and policy-making: Targeting toxic waste'. *Public Opinion quarterly*, 51(2), 166-185, 1987.

Rhine, R. & Severance, L. Ego-involvement, discrepancy, source credibility, and attitude change. *Journal of Personality and Social Psychology*, 16, 175-190, 1970.

Rogers, E. M., *Diffusion of Innovations.* Fourth Edition, New York, Free Press, 1995.

Ross, L., Lepper, M., and Hubbard, M. "Perseverance in Self-Perception and Social Perception: Biased Attributional Processes in the Debriefing Paradigm" , *Journal of Personality and Social Psychology*, 32, 1975.

Salmon, C. T. "Perspectives on involvement in consumer and communication research" In Brenda Dervin & Melvin J. Voigh (eds.), *Progress in Communication Sciences.* Norwood, NJ: Ablex. 243-268, 1986.

Sellers, L. and Jones, D. W. Environment and the mass media. *The Journal of Environmental Education*, 5(1), 51-57, 1973.

Sherif, C. W., Muzafer S., and Roger, E. N. *Attitude and Attitude Change: The Social Judgment-Involvement Approach.* Philadelphia: Saunders. 1965.

Stamm, K. R. "Environment and Communication" In F. G. Klike and P. J. Tichenor (eds.), *Current Perspectives in Mass Communication Research,* Beverly Hills: Sage Publications. 1972.

Sternthal, B., Dholakia, R., and Leavitt, C. The persuasive effect of source credibility: Tests of cognitive response. *Journal of Consumer Research*, 4, 252-260, 1978.

Trop, C. and Roos, L. L. "Public opinion and the environment" In L. L. Roos (ed.), *The Politics of Ecosuicide*, New York: Holt, Rinehart & Wilson, 52-63, 1971.

Van Liere, K. D. and Dunlap, R. E. The social bases of environmental concern: A review of hypotheses, explanations and empirical evidence. *Public Opinion Quarterly*, 44(2), 181-197, 1980.

The Relationship of Risk Information Processing to Consideration of Behavioral Beliefs

Robert J. Griffin
Center for Mass Media Research
College of Communication
Marquette University
Milwaukee WI 53201-1881
Phone: 414.288.6787
Fax: 414.288.5227
E-mail: GriffinR@Marquette.edu

Kurt Neuwirth
Department of Communication
University of Cincinnati
Cincinnati OH 45221

James Giese
Center for Mass Media Research
College of Communication
Marquette University
Milwaukee WI 53201-1881

Sharon Dunwoody
School of Journalism and Mass Communication
University of Wisconsin-Madison
Madison WI 53706

Presented at the "Top Three Paper" session, Science Communication Interest Group, Association for Education in Journalism and Mass Communication, 1999 Annual Convention, New Orleans, August.

The Relationship of Risk Information Processing to Consideration of Behavioral Beliefs

ABSTRACT

A model proposes that the form of information processing individuals apply to risk information from the media and other sources affects the number of behavioral beliefs they consider to be important to their judgments about performing risk-reducing behaviors and eventually influences the stability or maintenance of those behaviors. This study found that deeper, more systematic processing of risk information is positively related to behavioral belief accession and consideration across two communities and three risks (two health risks and one ecological risk). Education, representing processing capacity, enhances this relationship.

ACKNOWLEDGMENT

This research has been supported in whole or in part by the federal Agency for Toxic Substances and Disease Registry.

INTRODUCTION

In this study we test a hypothesis that evaluates the notion that systematic processing of health and environmental risk information leads individuals to consider a greater number of relevant beliefs about the risk when deciding what, if anything, to do about it personally. Although not tested in this analysis, individuals who consider more of these behavioral beliefs (e.g., weigh more of the costs and benefits to themselves of their performing a risk-reducing behavior) would be expected to develop cognitions, attitudes and eventually behaviors which are more stable (i.e., resistant to change) over time. Since the intent of most risk communication campaigns is to encourage persons to develop stable changes in risk-related behavior, factors that contribute to stability of behavior are important considerations.

A model of risk information seeking and processing (MRISP) developed Griffin, Dunwoody and Neuwirth (1999) serves as the conceptual framework underlying the hypotheses. The model's purpose is to help explain variation in how individuals respond to messages about health risks. In doing so, the model adapts and synthesizes components of two prominent models, Eagly & Chaiken's (1993) "Heuristic-Systematic Model" of information processing and Ajzen's Theory of Planned Behavior (Ajzen, 1988; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The former helps us understand how people come to seek, attend to, and process information about a given risk, and the latter helps us understand how those communication behaviors might ultimately affect individuals' risk-related behaviors (e.g., adoption and maintenance of preventive behaviors).

MRISP differs from most risk communication research, which typically employs risk information as an independent variable and evaluates the effect of the stimulus (e.g., message) on individuals' attitudes and behavior. Inherent in this approach is the assumption that information "does" something to individuals. If one can illuminate that causal process, goes the argument, one can then design message interventions that will cause people to buckle their seatbelts, recycle, or adopt low-fat diets. This top-down approach, no matter how well-intentioned, runs counter to suggestions by many risk perception researchers that risk communication should consider bottom-up approaches (see, for example, Krimsky & Plough, 1988; National Research Council, 1989; Juanillo & Scherer, 1995), which place an emphasis on the individual as a consumer of information who can become engaged intellectually in the risk issue at hand. Instead of just asking how messages may influence people, the bottom-up approach calls for a focus on understanding individual variation in the evaluative behaviors of the information user.

The model used to test the proposed hypothesis has two basic stages, which are a result of an integration of theoretical and empirical work in psychology and communication. The first half of the model includes variables predicting information seeking and processing tendencies. This part of the model feeds into the second half of the model, which predicts attitudes about a specific health risk and associated preventative behavior. Both stages of the model will be described below.

Information Processing

The model proposes mechanisms by which some individuals become more motivated to attend to and process information about health and environmental risks, and be more capable of doing so, and will therefore report spending more time and effort learning about such risks. The information processing variables used in the model (see right side of **Figure 1**) are based on Petty & Cacioppo's (1981) elaboration likelihood model (ELM) and, more recently, Eagly & Chaiken's (1993) heuristic-systematic model (HSM). Both models (ELM and HSM) describe dual forms of human processing of information, one more superficial (and which people tend to use unless motivated otherwise) and the other deeper and more effort-intensive.

According to the HSM formulation, a person's desire for sufficiency motivates systematic processing. The sufficiency principle, state Eagly & Chaiken (1993), "asserts that people will exert whatever effort is required to attain a 'sufficient' degree of confidence that they have accomplished their processing goals" (p. 330). For example, the personal relevance of the message topic to the individual can motivate people to do systematic processing of the message (Eagly & Chaiken, 1993). Eagly & Chaiken (1993) define heuristic processing as "a limited mode of information processing that requires less cognitive effort and fewer cognitive resources" (p.327) than systematic processing. The latter, by comparison, is a much more comprehensive effort to analyze and understand information. Applying Eagly & Chaiken's sufficiency principle to the MRISP formulation, it is proposed that the "Information Sufficiency" gap between what someone knows and what he or she needs to know (i.e., one needs to know more about how to take effective preventive action in the face of a health risk) motivates a person to devote more cognitive effort to processing messages about the behavior, e.g., evaluating the message critically, thinking about the message, integrating message-based information with what one already knows.

However, systematic processing is dependent upon one's capacity to think comparatively and critically, one's existing knowledge structures, and the perceived usefulness and credibility of available information. Therefore systematic processing should also affected by the variables called "perceived information gathering capacity" and "relevant channel beliefs." By default, however, most people employ the principle of least effort in processing messages, judging their validity and making decisions to comply through superficial cues such as the length of the message, the use of a trusted spokesperson, or the use of statistical data (e.g., as related to risk communication, the mere appearance of a risk estimate in a news story). This default is "heuristic processing." Both forms of processing, however, can take place simultaneously (Eagly & Chaiken, 1993).

In general, tests of the MRISP model have found that information sufficiency, consistent with the model, appears to be based partially on affective response to the risk, which is based in part on perceptions of hazard characteristics. Felt normative pressures also relate to information sufficiency (Griffin, Neuwirth & Dunwoody, 1998). Griffin, Dunwoody, Neuwirth & Giese (1999) found, in turn, that information sufficiency needs appear to motivate heuristic or systematic processing of risk information, as well as seeking or avoidance of it, consistent with the model. However, the roles of perceived information gathering capacity and relevant channel beliefs were found to be less clearly defined, perhaps due to measurement challenges.

Ultimately, the usefulness of the MRISP model depends in part on how seeking and processing of risk information relates to the adoption of risk-reduction behaviors. Therefore, the test of the model reported in this paper, in turn, looks at the potential impacts of systematic or heuristic processing of risk information on precursors to behavioral change.

Theory of Planned Behavior

In extending the implications of the risk information processing model to the realms of behavior, we rely on the concepts and measures of Ajzen's (1988) Theory of Planned Behavior

(TPB). The theory has been repeatedly tested across a wide range of human actions, including responses to health risks of various kinds (e.g., Boyd & Wandersman, 1991; Fishbein & Middlestadt, 1989; Griffin, Neuwirth & Dunwoody, 1995; Henning & Knowles, 1990; Knuth, Connelly & Shapiro, 1993; Montano & Taplin, 1991; Stassen & Fishbein, 1990).

The Theory of Planned Behavior (see **Figure 2**) suggests that a given behavior (B) will be predicted by behavioral intention (BI) and perceived behavioral control (PBC). PBC is the perceived ease of performing the behavior. Also predicting BI to one degree or another are attitude toward the behavior (AAct) and subjective norms (SN). AAct is the person's evaluation of performing the specific behavior and SN is the person's perception of whether or not relevant others believe he or she should perform the behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). A meta-analysis of dozens of studies found generally strong correlations (averaging .66) between BI and these two predictors and an average correlation of .53 between BI and actual performance (Sheppard, Hartwick & Warshaw, 1988). Therefore, if people evaluate positively their performance of a given behavior and/or think that others important to them want them to do it, people will be more likely to do it (Ajzen, 1988).

Antecedent to AAct is cognitive structure, a variable which is composed of a set of up to half a dozen or so salient behavioral beliefs (**b**) about performing a specific preventative behavior and an evaluation (**e**) (e.g., how good or bad) of each belief outcome (Fishbein & Ajzen, 1975). A behavioral belief is an estimate of the likelihood an outcome will be associated with the performance of the specific behavior (e.g., a person might believe that the behavior of "getting my annual flu shot" will probably "keep me from getting the flu this year"). A measure of "cognitive structure" (or "indirect attitude") is then formed by summing all the compounds (beliefs x evaluations). Cognitive structure is designed to predict attitude toward the behavior (AAct).

Figure 2 suggests various paths of relationships between MRISP and TPB (also see Griffin, Dunwoody & Neuwirth, 1999). The relationship of central interest in this paper is between risk information processing behavior and the components related to the stability of cognitive structure.

The Link Between Information Processing and Cognitive Structure

The central hypothesis tested in this paper is that systematic processing will be positively related to the number of salient beliefs individuals consider when deciding how to behave in response to a risk.

Ajzen and Sexton (in press) state that systematic processing, unlike heuristic processing, varies along a continuum of depth. "The depth of processing dimension is of importance for our purposes because it speaks to the domain of beliefs that become accessible in a given context. Clearly, the number of accessible beliefs is likely to increase with processing depth, and the strength and evaluative implications of accessible beliefs may also change as a result of continued deliberation" (p. 6). Thus, our study will (1) measure systematic processing along a continuum that includes self-report measures of achieving broader understanding and interpreting risk information to one's own life and (2) specifically measure the number of behavioral beliefs individuals access and consider strongly (i.e., salient beliefs) when deciding about a risk-reduction behavior.

Elsewhere (Eagly & Chaiken, 1993), it has been noted that, in general, attitudes developed through the more intense forms of processing are more stable and longer lasting than those developed through superficial processing. By extension, we expect that deeper systematic processing of risk-related information contributes to stability of one's attitude toward a risk-related behavior (AAct) because a greater number of relevant behavioral beliefs are accessed, weighed, and considered. In turn, stability of AAct should stabilize behavioral intention and ultimately risk-related behavior.

Chaiken, Liberman & Eagly (1989) suggest that individuals generally have the ability to process information systematically but, even when motivated to do so, can be constrained by situational and individual difference factors (e.g., time pressure, lack of knowledge). We expect that individual differences in educational achievement, which are often associated with better comprehension, retention, and communication capabilities (Griffin, 1990; Tichenor, Donohue & Olien, 1970), should enhance (or constrain) the efficiency of systematic processing. Specifically, those who have more education should be able to access and consider more behavioral beliefs per amount of systematic processing effort. If this is the case, then over time those with higher education (and the accompanying social status) will be more likely to develop stable, risk-reducing behaviors over time.

In terms of the relationship between the MRISP model and TPB (Figure 2), we would expect that educational achievement will moderate the relationship between depth of systematic information processing and the number of behavioral beliefs accessed in cognitive structure. Education, in this case, specifically represents information *processing* capacity, a variable not clearly expressed or adequately operationalized in the current MRISP model.

RESEARCH QUESTIONS AND HYPOTHESES

The first research question (**RQ1**) is: What is the relationship of heuristic and systematic processing of risk information to the number of behavioral beliefs about a risk-related behavior which an individual considers? Specifically:

> **H1a:** Greater use of systematic processing will be positively related to the number of behavioral beliefs considered.
>
> **H1b:** Greater use of heuristic processing will be negatively related to the number of behavioral beliefs considered.

The second research question (**RQ2**) is: What is the influence of educational achievement on the relationship between heuristic and systematic processing of risk information and the number of behavioral beliefs about a risk-related behavior which an individual considers? We expect that educational achievement will enhance the effectiveness of systematic processing depth such that:

> **H2a:** As compared to those with lower levels of educational achievement, those with higher levels of education will exhibit a stronger positive relationship between systematic processing and the number of beliefs considered.

METHOD

The overall purpose of the study is to test the Model of Risk Information Seeking and Processing (MRISP) and the Theory of Planned Behavior (TPB) by applying them to three selected health and environmental risks across two different metropolitan areas on the shores of the Great Lakes: Milwaukee, WI, on Lake Michigan, and Cleveland, OH, on Lake Erie. The current analysis examines only parts of the two models, specifically, one conjunction between them: the relationship of information processing (from MRISP) to the number of salient attributes brought to bear upon a risk-related decision (applying TPB). Two of the risks being examined entail potential for harm to personal health: eating Great Lakes fish and drinking tap water drawn from the Great Lakes. The third risk is environmental, specifically, threats to the health of the Great Lakes ecosystem.

Great Lakes fish consumption is the health risk of primary concern in this study. Fish in the Great Lakes, like fish from other waters, can contain various chemicals, most notably polychlorinated biphenyls (PCBs). Human consumption of PCB-laden fish is a suspected cancer risk and has been associated with developmental problems in infants whose mothers had regularly eaten PCB-contaminated fish. Every year for the past quarter century, states surrounding the Great Lakes, including Wisconsin and Ohio, have issued advisories that warn people to avoid or limit consumption of certain sizes and varieties of fish and that suggest ways to prepare the fish to reduce exposure to chemical contamination. This information is available in pamphlets, sometimes in news media, and potentially via other sources as well.

The second health risk of concern, potential hazards lurking in municipal drinking water, is of course not limited to the Great Lakes. Municipal drinking water can contain substances such as chemicals and lead, as well as organisms that occasionally slip past municipal water treatment systems. In recent years, the United States has seen an increase in major outbreaks of various waterborne illnesses. Probably the most salient outbreak took place in 1993 in Milwaukee, one of the communities in this study. A tiny parasite, cryptosporidium, entered the city drinking water from Lake Michigan and produced the largest recorded outbreak of waterborne disease in the nation's history. Milwaukee has since installed special monitoring equipment and is installing special treatment equipment. Nonetheless, cryptosporidium is difficult and expensive to detect and purge from municipal water systems and could potentially strike somewhere again. Thus, we are concentrating on an examination of people's responses to potential hazards from waterborne parasites.

The last risk evaluates peoples perception of, and concern about, the health of the Great Lakes ecosystem. The cumulative effects of dangerous emissions from industry, power plants, automobile exhausts and runoff from cities and farms has resulted in increased concentrations of toxins such as mercury, lead, dioxin, mirex and toxaphene. This poses a general health risk and has the effect of decreasing aesthetics and recreational opportunities.

Design, Sampling and Interviewing. The data in this analysis are drawn from the second wave of a three-wave, panel-design study being conducted in Milwaukee and Cleveland in 1996-97, 1997-98, and 1998-99. These two medium-sized American cities have experienced increases in concentrations of pollutants in the fish, water and sediments in the lake. Both cities also draw their drinking water from the lakes and have relatively ready access to commercially caught and sport-caught fish from the lakes.

From October 1996 to March 1997, the Wisconsin Survey Research Laboratory (WSRL), a professional research organization associated with the University of Wisconsin-Extension, conducted the first wave of a panel design, telephone sample survey of 1,122 adult residents of the two metropolitan areas (578 in Milwaukee and 544 in Cleveland). The combined response rate was 55.2% (61.3% in Milwaukee and 50% in Cleveland). Residences were contacted by random-digit-dialing (RDD) and respondents were chosen randomly within households. From October 1997 through March 1998, WSRL successfully reinterviewed 711 (63.4%) of the respondents from the previous year (375 in Milwaukee and 336 in Cleveland). As a control for sensitization in the panel, 172 new respondents were interviewed for the second wave, using the same procedures as were used to select respondents for the first wave, for a total N of 883 in the second wave (441 in Milwaukee and 442 in Cleveland).

This analysis concerns the only second wave of interviews because (1) TPB variables were not added to the questionnaire until the second wave, due to cost constraints, and (2) data from the third wave of interviews are not as yet available. The purpose for the third wave of interviews will be (1) to determine the stability of panelists' behavioral beliefs, attitudes toward the act, behavioral intentions and risk-related behaviors across time and (2) to determine how a subsample of panelists make use of a magazine-like article containing information relevant to the three risks being examined in the study.

At the start of the first wave interview, panelists had been assigned to one of three "paths" through the questionnaire that they would be assigned to throughout the three-wave study. New respondents in the second wave were similarly assigned to one of the paths. One path was comprised of questions dealing with the fish consumption risks ("fish path"), one path concerned the tap water risks ("tap water path"), and the third path was composed of questions about risks to the Great Lakes ecosystem ("ecosystem path"). Most questions in the tap water and ecosystem paths were identical in construction to questions in the fish path. This parallel construction was designed to allow meta-testing of the model by combining data across risks as much as possible. When respondents were to be presented with a series of items to be answered on the same kind of scale (*e.g.*, five point, Likert-type, agreement scale), the starting item in the rotation of items was chosen randomly.

Since applying the model to fish consumption risks was our primary goal, the interviewers' first questions were designed to net respondents for whom eating Great Lakes fish was a relevant personal matter. Respondents were assigned to the fish path if they had eaten a meal of Great Lakes fish that year or if they had made a decision to avoid these fish specifically because of health concerns. Respondents not in the fish path were randomly assigned to one of the other two paths. In all, 527 respondents remained in or were assigned to the fish path in the second wave (260 in Milwaukee, 267 in Cleveland), 204 were in the tap water path (111 in Milwaukee, 93 in Cleveland), and 155 were in the ecosystem path (70 in Milwaukee, 85 in Cleveland). Due to the dwindling subsample sizes, the third wave of interviews revisits only those in the fish path.

Second-wave interviews took approximately 27 minutes apiece. Applicable human subjects and informed consent practices were followed throughout.

Questionnaire Development. To aid in the development of the questionnaire, the Wisconsin Survey Research Laboratory conducted four focus groups with a random sample of Milwaukee area residents in the spring of 1996. The focus groups were designed to gather information about various components of MRISP and TPB that needed some exploratory investigation, including participants' self-reports of information processing activities (based on a stimulus article presented in the focus group) and relevant, salient behavioral beliefs. Intelligence from the focus group analyses was used to help prepare draft questionnaires distributed to a convenience sample of students at the researchers' three universities in the summers of 1996 and

1997. Combined, these questionnaires operationalized all of the models' components across a variety of risks. Item and scale analyses, conducted primarily by combining the data across risks and universities, yielded the measures to be used in the actual survey. The Wisconsin Survey Research Laboratory then conducted telephone pretests of the resulting questionnaire with random samples of Milwaukee and Cleveland residents before actual interviews began each year.

MEASUREMENT

Control Variables. Control variables included demographic variables, panel sensitization, perceived information gathering capacity, and information sufficiency.

Six **demographic** variables were used in this study as control variables. These are education (measured in terms of the highest grade or year of school completed), annual income, age, gender, and ethnicity (whether the person is a member of a minority group). The respondent's community — Milwaukee (coded as 1) or Cleveland (2) — is also included as a control variable. Education and income are included as separate variables instead of being combined as a measure of social status because reliability of the resulting status scale was only marginal. Education in particular may affect information processing capacity and its outcomes.

Panel **sensitization** was measured as whether (=1) or not (=0) the respondent had also been interviewed for the study during the first wave.

Perceived information-gathering capacity was the sum of two items (alpha=.59) that asked individuals to respond, on five-point, Likert-type scales, to the statements: "If I wanted to, I could easily get all the information I need about this topic" and "It is hard for me to get useful information about this topic" (reverse-coded).

Information sufficiency was represented by two separate self-report variables measured on 0-100 scales: **(1)** *current knowledge* about the risk and **(2)** the information *sufficiency threshold*, that is, the amount of knowledge they would need to deal adequately with the risk (fish and tap water paths) or to achieve an understanding of threats to the health of local Great Lake that is good enough for their purposes (ecosystem path).

Information sufficiency and capacity measures were included as control variables because of their proximity to information processing measures in the Model of Risk Information Seeking and Processing. Channel beliefs were not included in the analysis because of some measurement reliability problems in the second wave.

Independent Variables: Risk Information Processing. Our model includes aspects of information processing (heuristic and systematic) that are a part of the HSM formulation.

Heuristic processing is a mode of processing that is less effortful and uses fewer cognitive resources (Eagly & Chaiken; 1993). Four questionnaire items measured heuristic processing of risk information. Respondents indicated via five-point, Likert-type scales their agreement or disagreement with the following statements which, they were told, represented different ways that people personally deal with information that they run across in the mass media and other places about the given risk: (a) "When I encounter information about this topic, I focus on only a few key points"; (b) "If I have to act on this matter, the advice of one expert is good enough for me"; (c) "When I see or hear information about this topic, I rarely spend much time thinking about it"; (d) "There is far more information on this topic than I personally need." Greater agreement represented a general pattern of heuristic processing of the relevant information.

Based on work by various authors (e.g., Griffin, Dunwoody & Zabala, 1998; Kosicki & McLeod, 1990; Perse,1990a,b,c), five items were similarly used to measure *systematic processing* of risk information. These were: (a) "After I encounter information about this topic, I am likely to stop and think about it"; (b) "If I need to act on this matter, the more viewpoints I get the better"; (c) "It is important for me to interpret information about this topic in a way that applies directly to my life"; (d) "After thinking about this topic, I have a broader understanding"; (e) When I encounter information about this topic, I read or listen to most of it, even though I may not agree with its perspective." Items **c** and **d**, in particular, should represent deeper processing (e.g., drawing inferences and relationships to what is already known), and so depth of processing is included in the operational definition of systematic processing employed in this study. Greater agreement with all the items represented a general pattern of systematic processing of the relevant information.

The four heuristic processing and five systematic processing items were subjected to a factor analysis (Varimax rotation), which produced the two distinct factors in **Table 1**. Although the items loading highly on each factor are the same as the results found for the first wave, the loadings differ somewhat. Therefore, instead of computing weighted factor scores, we produced simple summated scales representing systematic processing (5 items, alpha = .60) and heuristic processing (4 items, alpha=.56).

Dependent Variable: Belief Consideration. As part of the interview, respondents were asked an entire set of questions which operationalized relevant concepts from TPB. The target behavior in the fish path was avoiding consumption of fish from the local Great Lake, the target behavior in the tap water path was drinking bottled water instead of tap water drawn from the lake, and the target behavior in the ecosystem path was taking used or leftover oil and chemicals to a disposal center instead of tossing them into the trash or pouring them down the drain. Respondents in the ecosystem path were told that the phrase "oil and chemicals" referred to used motor oils and other petroleum products and chemicals such as old insect or weed killers, paint thinners, solvents, chemical fertilizers, and similar substances people sometimes have around their homes.

Among the TPB-related questions, respondents in each path were presented with a set of items designed to measure their salient behavioral beliefs (i.e., beliefs about outcomes and other attributes which they might associate with their performing the target behavior and which they might consider in deciding how to behave) and outcome evaluations (i.e., the positive or negative value they put on each outcome or attribute associated with the behavior). These items were derived from focus group research and other sources.

To report salient behavioral beliefs, individuals in the fish path indicated whether they take into account (1) risk from PCBs, (2) convenience, (3) nutrition, (4) taste, (5) meal variety, (6) expense, and (7) preparation time in deciding whether or not to eat fish from the local Great Lake.[1] Individuals in the tap water path indicated whether they consider (1) risk from a waterborne parasite, (2) risk from chemicals in the water, (3) convenience, (4) taste, (5) expense, (6) refreshment, and (7) which takes more time to do when they decide whether to drink bottled water instead of the Lake-drawn tap water. Those in the ecosystem path indicated whether they consider, when deciding whether to take oil and chemicals to a disposal center, whether (1) it might affect the health of the local Great Lake, (2) convenience, (3) expense, (4) effort, (5) time, (6) whether they would feel like they are doing something for the environment, and (7) whether they would feel like they are a part of the community. Individuals provided responses by using a five-point, Likert-type scale which ranged from one (strong disagreement) to five (strong agreement) that they take into account each factor when deciding whether or not to perform the target behavior.

The number of **salient beliefs considered** by each respondent was calçulated by counting the number of beliefs he or she "strongly agreed" are considered when he or she decides on the specific behavior, a measure which could range from zero to seven in each path. (Obtained scores in the tap water and ecological paths ranged from zero to six.) Including just the statements strongly agreed to was expected to minimize the effects of social desirability biases and respondent agreeability in the interview situation. To minimize problems of skewness and kurtosis in the resulting measure, the final score for each individual in each path was derived by adding one to the obtained score and deriving the base-10 log of the resulting sum.

ANALYSIS

The Statistical Package for the Social Sciences (SPSS) was used to perform a series of zero-order and partial correlation analyses. The analyses concentrated on the relationships the two information processing variables had with consideration of salient behavioral beliefs respondents held about performing the various risk-related behaviors. The partial correlation analyses also employed the control variables noted above. Missing data in demographic control variables were replaced with an appropriate measure of central tendency. Listwise deletion of cases with missing data was used throughout.

For the first research question, analyses proceeded by examining these relationships in the overall sample in the second wave and then by examining replications of results within community and path subsamples. For the second research question, analyses proceeded by examining these relationships by three levels of educational achievement in the entire sample.

RESULTS

The first research question (**RQ1**) was: What is the relationship of heuristic and systematic processing of risk information to the number of behavioral beliefs about a risk-related behavior which an individual considers?

Table 2 displays the descriptive statistics for the items that measure the extent to which respondents said they considered (i.e., accessed) the various behavioral beliefs when deciding whether to perform the three types of risk-related behaviors. None of the beliefs singly are considered by as many as a quarter of the respondents in each path. This result may be due to the stringent "strongly agree" cutoff point used to identify belief salience in this analysis. Nonetheless, risk-related beliefs are among the most frequently considered beliefs in each path, a finding that suggests that they have some importance among a significant segment of the population when they decide whether to eat Great Lakes fish, drink tap water drawn from the Great Lakes, or whether to take used or leftover oil and chemicals to a disposal center, an action which can affect the ecological health of the Great Lakes.

In the entire sample, the number of behavioral beliefs individuals consider when contemplating a risk-related behavior is positively related to systematic processing of risk information ($r=.25$, $p \leq .001$; partial $r=.21$, $p \leq .001$), as shown in **Table 3.** This relationship is fairly consistent in each community and in regard to each risk-related behavior (i.e., path) both in terms of zero-order and partial correlations. Therefore, **H1a** is supported. The relationship in the entire sample between heuristic processing and belief consideration is negative, as hypothesized, but generally weaker ($r= -.14$, $p \leq .001$; partial $r= -.08$, $p \leq .05$). All of the zero-order subsample comparisons are statistically significant, but only two of the five partial correlation coefficients achieve statistical significance. Therefore, there is only weak and tentative support for **H1b.**

The second research question (**RQ2**) was: What is the influence of educational achievement on the relationship between heuristic and systematic processing of risk information and the number of behavioral beliefs about a risk-related behavior which an individual considers?

The zero-order and partial correlation coefficients in **Table 4** indicate that the positive relationship between systematic processing and belief consideration strengthens as educational achievement increases. Specifically, the partial correlation is .15 ($p \leq .05$) among those with the lowest level of education (i.e., through high school), .21 ($p \leq .001$) among those with medium levels of education (i.e., some college or technical school), and .28 ($p \leq .001$) among those with the highest level of education (college graduates). Thus, **H2a** is supported. It also appears that the negative relationship between heuristic processing and belief consideration strengthens as education increases, although the biggest difference is between those with the highest level of education and the rest (partial r= .01, *ns*, among those with low education; -.07, *ns*, among those with medium levels of education, and -.20, p≤.001, among those with the highest levels of education).

DISCUSSION

Based on the Model of Risk Information Seeking and Processing and Ajzen's (1988) Theory of Planned Behavior (TPB), we proposed that the style of processing of risk-related information that individuals employ would be related to the number of relevant beliefs about the risk they consider when deciding what, if anything, to do about it personally. We are particularly interested in systematic processing, since Eagly & Chaiken (1993) have proposed that systematic processing leads to the establishment of stable attitudes. To model the proposed, eventual influence of information processing on risk-related behavior, we further apply this notion of attitude stability to the stability of Attitude Toward the Act (AAct), a behavior-predictive component of TPB. In our research program, still underway, we propose that systematic processing of risk-related information will eventually stabilize AAct and, by extension, risk-related behavior. Factors that contribute to stability of risk-reduction or preventive behaviors are important considerations in risk, health, safety, and environmental communication campaigns.

We expected that, as part of these dynamics, greater use of systematic processing of risk-related information would contribute to the stability of AAct because a greater number of relevant behavioral beliefs would be accessed, weighed, and considered when risk information is processed more deeply. In the TPB formulation, behavioral beliefs are part of what has been termed cognitive structure, or "indirect attitude," a predictor of AAct. Factors which affect cognitive structure should also eventually affect AAct.

Our study examines these dynamics in the context of three risks. Two are health risks, one from eating Great Lakes fish which might contain PCB's, and the other from drinking municipal tap water drawn from the Great Lakes which might potentially contain parasites or chemicals. Although the Model of Risk Information Seeking and Processing was originally developed to trace the factors related to deeper processing of health risk information, it is also being applied to examination of individuals' responses to information about an environmental risk, in this case, risks to the Great Lakes ecosystem stemming from improper disposal of household oils and chemicals. One specific behavior is under scrutiny for each of these three risks: (1) avoidance of eating Great Lakes fish, (2) drinking bottled water instead of Great Lakes tap water, and (3) taking household oils and chemicals to a disposal center.

In this analysis, we focused on the relationship between systematic processing of risk information and the number of behavioral beliefs individuals access and consider when deciding on performing one of these risk-reducing behaviors. In the process, we also examined how heuristic processing, a more superficial and, in effect, common or default form of information processing, was related to consideration of behavioral beliefs. We expected that greater reliance on heuristic processing of risk information would result in the individual considering fewer behavioral beliefs. Ultimately, this kind of processing may result in unstable performance of risk-related behaviors. Future analyses in this research program will trace the relationship of information processing to behavioral stability.

This analysis found that individuals who process risk information more systematically and deeply do seem to access and consider a larger number of behavioral beliefs when considering performance of a risk-reducing behavior. Risk-related beliefs appear to be among the most commonly accessed beliefs when individuals process risk-related information, which suggests that they have potential to affect individual's risk and behavioral judgments. The relationship between systematic processing and belief consideration replicated within each of the studied communities. It also held true for the ecological risk in our study as well as for the two health risks, which suggests that MRISP may be applicable to environmentally relevant, risk-reducing behaviors as well as to health risk behaviors.

The analysis also found that the hypothesized negative relationship between use of heuristic processing and belief consideration was relatively small and inconsistent across communities and risks (paths). Among the potential explanations, it is possible that the kind of risk or risk-related behavior under consideration makes a difference in how beliefs are accessed by those using heuristic processing. In particular, the relationship between heuristic processing and belief consideration did not hold when statistical controls were introduced within the two health risk paths, but it did remain statistically significant within the ecological path. (This further suggests that MRISP may be applicable to environmental risk-reducing behaviors.) Future research should examine these dynamics. It is also possible that the marginal reliability of both the heuristic and the systematic processing measures at this early stage of their development might have suppressed any coefficients involving these variables. It should be noted, however, that the relationships found between systematic processing and belief consideration suggest that the existing measures of systematic processing in this study do represent a deeper form of systematic processing.

The results also showed that educational achievement, which was expected to represent the capacity of the individual to process information, appears to influence the relationship between risk information processing and belief consideration. The positive relationship between systematic processing and belief consideration strengthens as educational achievement increases, as does the negative relationship between heuristic processing and belief consideration. Those with the highest levels of education (i.e., college) in this study show the strongest versions of these relationships.

These results suggest that MRISP should be amended to show the potential influence of information processing capacity on the relationship between risk information processing and cognitive structure. (The third wave survey does include a measure designed to represent capacity to process and not just gather risk-relevant information.) Specifically, those with higher levels of education may have learned more effective ways of performing systematic and heuristic processing of information gleaned from the mass media and other sources, bringing these cognitive skills to bear to efficiently access or ignore beliefs stored in human long term memory. This interpretation would be consistent with the knowledge gap hypothesis (Tichenor, Donohue, and Olien, 1970). Ultimately, more efficient systematic processing of risk-related information by the better educated, higher status segments of society might eventually contribute to a "gap" in adoption and maintenance of preventive health behaviors by the better off. Future research could examine this possibility.

CONCLUSION

Building on previous research in this program, and based on the Model of Risk Information Seeking and Processing and the Theory of Planned Behavior (TPB), this study found support for a predicted relationship between systematic processing of risk-related information and behavioral beliefs individuals access and consider when posed with performing a risk-reducing behavior in the realms of health and the environment. Future research will examine the relationship of these cognitions to the rest of the elements of TPB as applied to these risks, looking in particular for a relationship of systematic processing of risk information to the stability of risk-reducing behavior.

NOTES

[1] Respondents in the fish path who have or plan to have children were also asked whether they take into account the health of their present or future children when deciding whether or not to eat fish from the local Great Lake. To streamline analysis, this item was omitted from the current analysis.

REFERENCES

Ajzen, I. (1988). "Attitudes, Personality, and Behavior," Open University Press, Milton Keynes, UK.

Ajzen, I., and Fishbein, M. (1980). "Understanding Attitudes and Predicting Behavior," Prentice-Hall, Englewood Cliffs, NJ.

Ajzen, I., and Sexton, J. (In press). Depth of processing, belief congruence, and attitude behavior correspondence. In "Dual Process Theories on Social Psychology" (S. Chaiken and Y. Trope, Eds.). Guilford, New York.

Boyd, B., and Wandersman, A. (1991). Predicting undergraduate condom use with the Fishbein and Ajzen and the Triandis attitude-behavior models: Implications for public health interventions. *Journal of Applied Social Psychology*, 21, 1810-1830.

Chaiken, S., Liberman, A., and Eagly, A.H. (1989). Heuristic and systematic processing within and beyond the persuasion context. In "Unintended Thought" (J.S. Vleman and J.A. Bargh, Eds.), Pp. 212-252. Guilford, New York.

Eagly, A.H. and Chaiken, S. (1993). "The Psychology of Attitudes," Harcourt Brace Jovanovich, Fort Worth.

Fishbein, M. and Ajzen, I. (1975). "Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research," Addison-Wesley, Reading, MA.

Fishbein, M., and Middlestadt, S.E. (1989). Using the Theory of Reasoned Action as a framework for understanding and changing AIDS-related behaviors. In "Primary Prevention of AIDS: Psychological Approaches" (V.M. Mays, G.W. Albee and S.F. Schneider, Eds.), Pp. 93-110. Sage, Newbury Park, CA.

Griffin, R.J. (1990). Energy in the eighties: Education, communication, and the knowledge gap. *Journalism Quarterly* 67, 554-566.

Griffin, R.J., S. Dunwoody, and K. Neuwirth. (1999). Proposed model of the relationship of information seeking and processing to the development of preventive behaviors. *Environmental Research* 80:.

Griffin, R.J., Dunwoody, S., and Zabala, F. (1998). Public reliance on risk communication channels in the wake of a cryptosporidium outbreak. *Risk Analysis* 18, 367-375.

Griffin, R.J., Neuwirth, K., and Dunwoody, S. (1998). Information sufficiency and risk communication. Presented to the Association for Education in Journalism and Mass Communication annual convention. Baltimore MD. August.

Griffin, R.J., Neuwirth, K., and Dunwoody, S. (1995). Using the theory of reasoned action to examine the impact of health risk messages. In "Communication Yearbook 18" (B.R. Burleson, Ed.), Pp. 201-228. Sage, Thousand Oaks, CA.

Griffin, R.J., Dunwoody, S., Neuwirth, K., and Giese, J. (1999). The relationship of information sufficiency to seeking and processing risk information. Accepted for presentation to the International Communication Association annual convention. San Francisco. May.

Henning, P., and Knowles, A. (1990). Factors influencing women over 40 years to take precautions against cervical cancer. *Journal of Applied Social Psychology* 20, 1612-1621.

Juanillo Jr., N.I. and Scherer, C.W. (1995). Attaining a state of informed judgments: Toward a dialectical discourse on risk. In "Communication Yearbook 18" (B.R. Burleson, Ed.), Pp. 278-299. Sage, Thousand Oaks, CA.

Knuth, B.A., Connelly, N.A., and Shapiro, M.A. (1993). "Angler Attitudes and Behavior Associated with Ohio River Health Advisories," Cornell University Human Resources Research Unit, Ithaca, NY.

Kosicki, G.M., and McLeod, J.M. (1990). Learning from political news: Effects of media images and information processing strategies. In S. Kraus, ed., "Mass Communication and Political Information Processing" (S. Kraus, Ed.), Pp. 69-83. Erlbaum, Hillsdale, NJ.

Krimsky, S. and Plough, A. (1988). "Environmental Hazards: Communicating Risks as a Social Process." Auburn House, Dover MA.

Montano, D.E., and Taplin, S.H. (1991). A test of an expanded Theory of Reasoned Action to predict mammography participation. *Social Science and Medicine*, 32, 733-741.

National Research Council (1989). "Improving Risk Communication," National Academy Press, Washington, DC.

Perse, E.M. (1990a). Audience selectivity and involvement in the newer media environment. *Communication Research* 17, 675-697.

Perse, E.M. (1990b). Media involvement and local news effects. *Journal of Broadcasting and Electronic Media* 34, 17-36.

Perse, E.M. (1990c). Involvement with local television news: Cognitive and emotional dimensions. *Human Communication Research* 16, 556-581.

Petty, R.E. and Cacioppo, J.T. (1981). "Attitudes and Persuasion: Classic and Contemporary Approaches," W.C. Brown, Dubuque, IA.

Sheppard, B.H., Hartwick, J., and Warshaw, P.R. (1988). The Theory of Reasoned Action: A meta-analysis with recommendations for modifications and future research. *Journal of Consumer Research,* 15, 325-343.

Stasson, M., and Fishbein, M. (1990). The relation between perceived risk and preventive action: A within-subject analysis of perceived driving risk and intentions to wear seatbelts. *Journal of Applied Social Psychology*, 20, 1541-1557.

Tichenor, P., Donohue, G., and Olien, C. (1970). Mass media flow and differential growth in knowledge. *Public Opinion Quarterly*, 34, 159-170.

Table 1:
Factor Analysis of Systematic and Heuristic Risk Information Processing Items (Wave 2)

	FACTOR LOADINGS	
ITEM **[Questionnaire item number]** ***(Communality)***	**Factor 1: Systematic Processing**	**Factor 2: Heuristic Processing**
SYSTEMATIC:		
[40] After thinking about this topic, I have a broader understanding. *(.50)*	**.71**	.05
[47] When I encounter information about this topic, I read or listen to most of it, even though I may not agree with its perspective. *(.44)*	**.65**	-.10
[45] It is important for me to interpret information about this topic in a way that applies directly to my life. *(.33)*	**.57**	-.05
[36] After I encounter information about this topic, I am likely to stop and think about it. *(.45)*	**.53**	-.41
[38] If I need to act on this matter, the more viewpoints I get the better. *(.34)*	**.43**	-.39
HEURISTIC:		
[43] If I need to act on this matter, the advice of one expert is enough for me. *(.45)*	-.02	**.67**
[42] When I encounter information about this topic, I focus on only a few key points. *(.44)*	.09	**.65**
[46] There is far more information on this topic than I personally need. *(.43)*	-.20	**.63**
[33] When I see or hear information about this topic, I rarely spend much time thinking about it. *(.37)*	-.35	**.50**
Eigenvalue:	2.57	1.18
Pct. Of Variance:	28.6	13.1

Principal components procedure. Varimax rotation.
N=839.
Reliability (Theta) = .69

BEST COPY AVAILABLE

Table 2:
Descriptive Statistics for Behavioral Belief Consideration Items by Path

Path/Item	Original 1-5 Scale [illegible] Mean	 Std Dev	 [illegible] who Strongly Agree
FISH PATH: ***In deciding whether or not to eat fish from Lake [Michigan] [Erie], I take into account:***			
The taste of fish. (n=522)	**3.87**	**.92**	**19.9**
Whether I might be at risk from PCBs. (n=513)	3.71	1.04	22.0
The variety of my meals. (n=523)	3.71	.89	10.7
The nutrition that fish provide. (n=521)	3.61	.98	11.1
Which is more convenient to do. (n=511)	3.11	1.10	6.8
Which is more expensive to do. (n=509)	3.01	1.07	6.5
In deciding whether to eat fish from Lake [Michigan] [Erie], or to eat something else instead, I take into account which takes more time to do. (n=520)	2.92	1.06	4.6
TAP WATER PATH: ***In deciding whether to drink bottled water instead of tap water drawn from Lake [Michigan] [Erie], I take into account:***			
The taste of the water. (n=199)	3.73	.90	14.6
Whether I might be at risk from a parasite in the water. (n=201)	3.48	1.08	14.4
Whether I might be at risk from chemicals in the water. (n=200)	3.46	1.01	10.5
Which one is more expensive to do. (n=202)	3.44	1.10	13.4
Which water is more refreshing. (n=198)	3.30	.95	5.1
Which one is more convenient to do. (n=202)	3.27	1.02	5.0
Which one takes more time to do. (n=196)	2.91	1.06	5.6
ECOLOGICAL PATH: ***In deciding whether to take used or leftover oil and chemicals to a disposal center, I take into account:***			
Whether I would feel like I am doing something for the environment. (n=154)	4.14	.59	23.4
Whether it might affect the health of Lake [Michigan] [Erie]. (n=154)	3.97	.80	20.8
Whether I would feel like I am a part of the community. (n=153)	3.73	.90	11.7
Whether it is convenient to do. (n=153)	2.88	1.09	3.9
Whether it takes a lot of time to do. (n=151)	2.88	1.06	2.7
Whether it would require a lot of effort to do. (n=154)	2.86	1.03	1.9
Whether it is expensive to do. (n=151)	2.83	1.04	2.0

Response scale: *(5) Strongly agree; (4) Agree; (3) Feel neutral; (2) Disagree; (1) Strongly disagree.*

BEST COPY AVAILABLE

Table 3: Relationship of Risk Information Processing to Consideration of Behavioral Beliefs, by Community and Risk

	Correlation[1] with Number of Behavioral Beliefs Considered			
Sample/Subsample	Systematic Processing		Heuristic Processing	
	r	Partial r	r	Partial r
All	**.25c**	**.21c**	**-.14c**	**-.08a**
n=	*792*	*778*	*792*	*778*
Milwaukee	**.30c**	**.26c**	**-.10a**	-.05
n=	*394*	*388*	*394*	*388*
Cleveland	**.19c**	**.16b**	**-.17c**	**-.11a**
n=	*398*	*390*	*398*	*390*
Fish Risk (Path)	**.23c**	**.19c**	**-.10a**	-.03
n=	*473*	*466*	*473*	*466*
Tap Water Risk (Path)	**.28c**	**.26c**	**-.16a**	-.11
n=	*178*	*173*	*178*	*173*
Ecological Risk (Path)	**.22b**	**.18a**	**-.23b**	**-.15a**
n=	*141*	*139*	*141*	*139*

Significance (one-tailed) key:

a $p \leq .05$

b $p \leq .01$

c $p \leq ..001$

[1] Partial correlations are controlled by T1-2 sensitization, age, education, income, minority status, gender, self-reported current knowledge, sufficency threshold, perceived information gathering capacity, and (except for comparisons made within communities) community.

BEST COPY AVAILABLE

Table 4: Relationship of Risk Information Processing to Consideration of Behavioral Beliefs, by Level of Education

Sample/Subsample	Correlation[1] with Number of Behavioral Beliefs Considered			
	Systematic Processing		Heuristic Processing	
	r	Partial r	r	Partial r
All	**.25c**	**.21c**	**-.14c**	**-.08a**
n=	*792*	*778*	*792*	*778*
LEVEL OF EDUCATION [2]				
Low	**.21c**	**.15a**	-.09	.01
n=	*255*	*250*	*255*	*250*
Medium	**.24c**	**.21c**	**-.12a**	-.07
n=	*256*	*252*	*256*	*252*
High	**.28c**	**.28c**	**-.21c**	**-.20c**
n=	*281*	*276*	*281*	*276*

Significance (one-tailed) key:

a p≤.05

b p≤.01

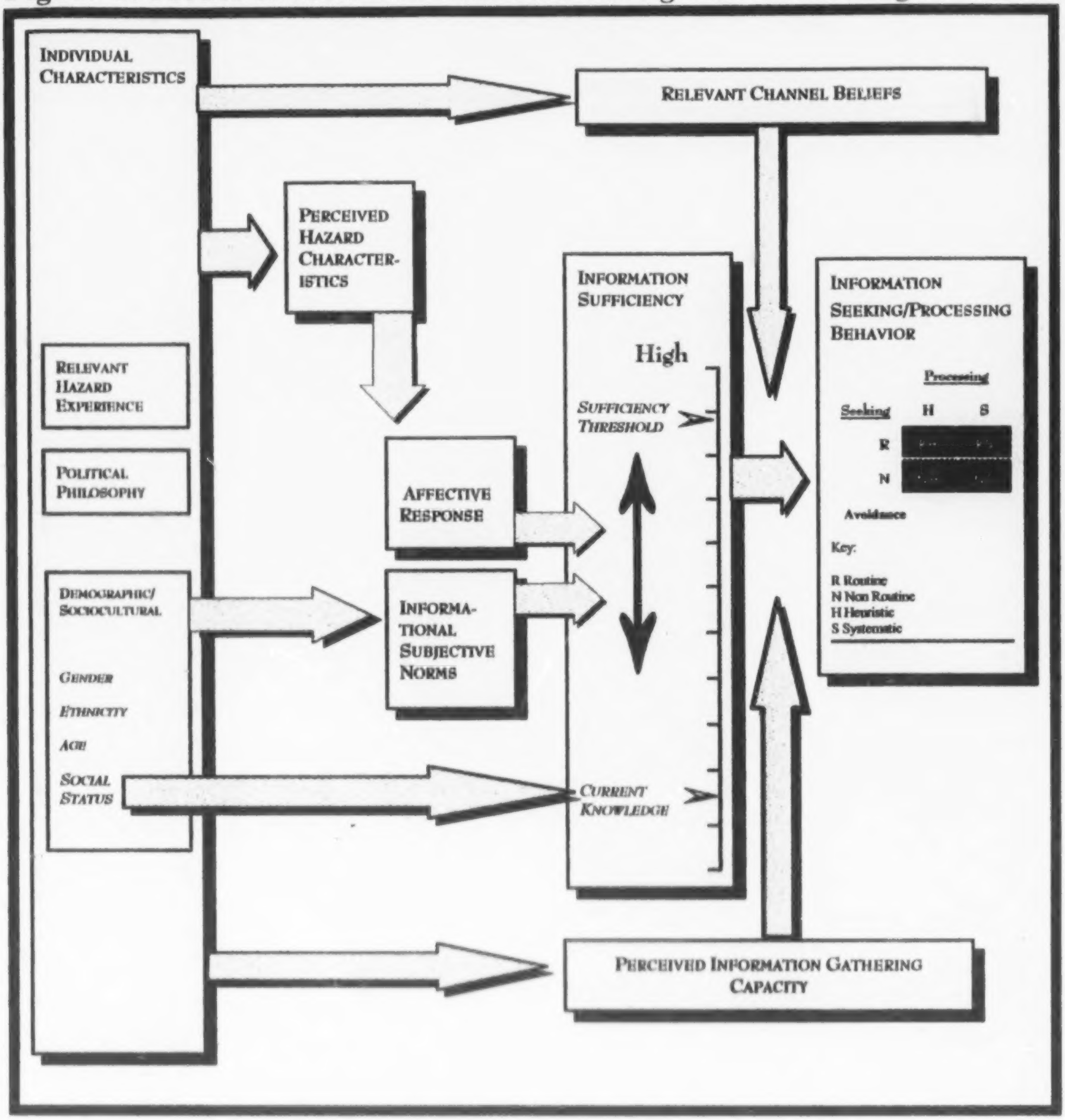
c p≤..001

[1] Partial correlations are controlled by T1-2 sensitization, age, education, income, minority status, gender, self-reported current knowledge, sufficency threshold, perceived information gathering capacity, and (except for comparisons made within communities) community.

[2] Low=through high school; Medium=some college or technical school; High=college degree(s).

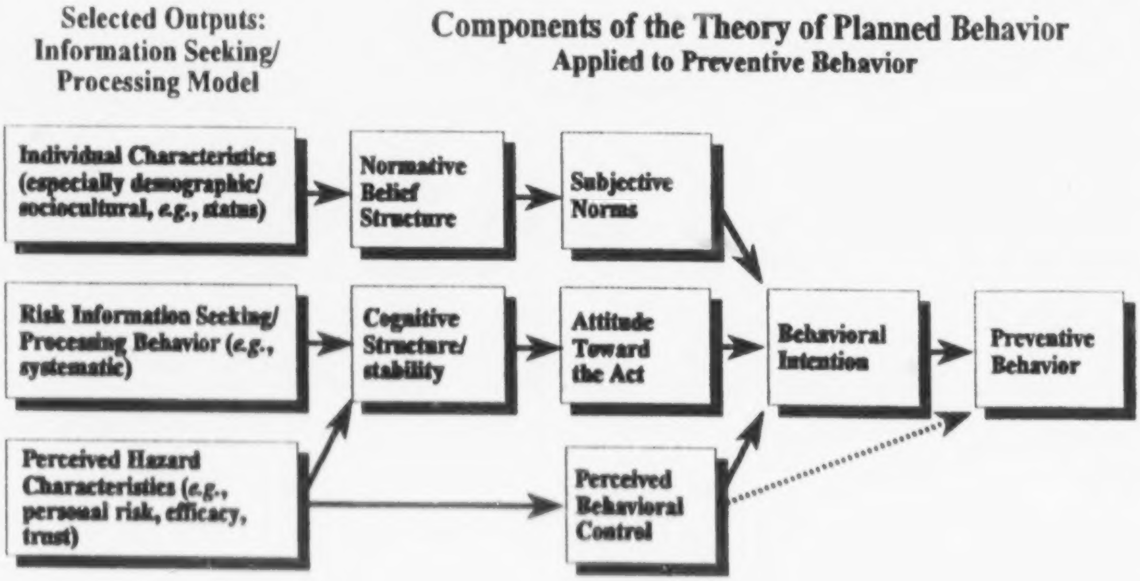
BEST COPY AVAILABLE

Figure 1: Model of Risk Information Seeking and Processing



BEST COPY AVAILABLE

Figure 2:
Relationship of Risk Information Seeking and Processing Model to the Theory of Planned Behavior as Applied to Preventive Behavior


Selected Outputs:
Information Seeking/
Processing Model
Components of the Theory of Planned Behavior
Applied to Preventive Behavior
Individual Characteristics (especially demographic/ sociocultural, e.g., status)
Normative Belief Structure
Subjective Norms
Risk Information Seeking/ Processing Behavior (e.g., systematic)
Cognitive Structure/ stability
Attitude Toward the Act
Behavioral Intention
Preventive Behavior
Perceived Hazard Characteristics (e.g., personal risk, efficacy, trust)
Perceived Behavioral Control

BEST COPY AVAILABLE